ONTARIO COLLEGE OF TRADES

ORDRE DES MÉTIERS DE L'ONTARIO

Apprenticeship Training Standard Log Book

Welder

456A

What Is This About?

The Apprenticeship Training Standard Log Book identifies all the skills associated with your trade in Ontario. It is written in statements that describe how you, the apprentice, must perform each skill in order to be considered competent in that skill.

Training As An Apprentice

- Notify Ministry of Training, Colleges and Universities (MTCU) staff **immediately** of any changes to contact information or training agreement, especially if you change sponsors.
- Review the Log Book regularly with your trainer and sponsor to track your progress.
- 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.
- Pay your annual membership fee to the Ontario College of Trades and keep your membership in good standing.

Completing Your Log Book

There are two types of signatures required in your Log Book:

Skill Confirmation

You and your trainer sign off each required skill to confirm that you have demonstrated competency in that skill.

Skill Set Confirmation

After you and your trainer have signed off all the required skills in a skill set, **your sponsor** signs the signature box at the end of each skill set to confirm your competency in the skill set.

Shaded boxes in your Log Book 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.

Changing Sponsors

- Contact MTCU immediately if you change sponsors as you will need to sign a new Registered Training Agreement.
- Record your original Sponsor's information in Sponsor Record #1 (the sponsor who has signed your initial Registered Training Agreement).

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.

ONTARIO COLLEGE OF TRADES
ORDRE DES MÉTIERS DE L'ONTARIO

Apprentice Name: _____

Address: _____

_____

Phone Number: _____

Email Address: _____

Trade: _____

Ministry of Training, Colleges and Universities Registered Training Agreement #:

OCOT Membership #:

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 Training Standard Log Book or about your Apprenticeship program, contact your Apprenticeship office (see Appendix D in this book) or the Employment Ontario hotline at: 1-800-387-5656.

You must become a member of the College of Trades Apprentices Class and maintain your membership in good standing while you complete your training. For more information on membership, please visit the College of Trades website at: collegeoftrades.ca

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**** Indicates the 6 processes of which 3 must be signed off (6007.0 – 6012.0). Optional performances are shaded.***

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

Maintained with transfer to Ontario College of Trades, 2007 (V200)

TERMS AND CONDITIONS AS PER REGISTERED TRAINING AGREEMENT

The Apprentice agrees:

- **to inform the Ministry of Training, Colleges and Universities of any change to their 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 Apprentice Training Standard Log Book (Log Book) for the Trade which is part of the apprenticeship program established by the Ontario College of Trades for the trade;
- to obtain written verification from the Sponsor and the Trainer(s) that the requirements in the Log Book for the trade have been met.

The Sponsor agrees:

- to ensure that the Apprentice is provided with the training required as part of the apprenticeship program established by the College of Trades for this trade;
- to ensure that the Trainer(s) verifies, in writing, when each skill identified in the Log Book for the trade has been successfully completed by the Apprentice;
- 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.

RESOURCE	LINK
Red Seal Program	red-seal.ca
Ministry of Training, Colleges and Universities	tcu.gov.on.ca
Employment Ontario	tcu.gov.on.ca/eng/employmentontario.ca
Service Canada	servicecanada.gc.ca
Ontario College of Trades and Apprenticeship Act, 2009	*Ontario College of Trades and Apprenticeship Act, 2009*
Ontario Ministry of Labour – Health and Safety Partners	labour.gov.on.ca
College of Trades Appointments Council	cot-appointments.ca
Essential Skills Ontario	essentialskillsontario.ca
Exam Preparation Guide	collegeoftrades.ca

INTRODUCTION TO THE LOG BOOK

On April 8th, 2013, the Ontario College of Trades (College) became responsible for the development and maintenance of Log Books in the Province of Ontario.

Please refer to the College of Trades website for the most accurate and up-to-date information: collegeoftrades.ca

This Log Book is intended to be used by the Apprentice and Sponsor as an official record of training. The completion of this document is necessary to complete your apprenticeship and receive your Certification of Apprenticeship.

The Log Book identifies skills required for this trade and its related training program. It has been written in statements which describe how you, the Apprentice, must perform each skill in order to become competent in your trade.

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

This on-the-job Log Book is a document issued to Apprentices who sign a Registered Training Agreement in the Province of Ontario. It is designed to record an Apprentice's acquired skills and time worked for the trade to which they are registered. This Log Book is developed by the Ontario College of Trades and used by the Ministry of Training, Colleges and Universities.

This Apprenticeship Log Book for Welder 456A was developed in consultation with representatives from industry and may include members from a related Trade Board/Working Committees.

The information presented in this standard is, to the best of our knowledge, current at time of printing and is intended for general application.

ROLES AND RESPONSIBILITIES

Ontario College of Trades
Under the *Ontario College of Trades and Apprenticeship Act, 2009* (OCTAA), the College of Trades is responsible for:

- Establishing and maintaining qualifications for membership;
- Issuing Certificates of Qualification and Statements of Membership;
- Maintaining a Public Register of members;
- Receiving and investigating complaints, and determining disciplinary action;
- Establishing Apprenticeship Programs, Training Standards and Scopes of Practice for each trade;
- Conducting Trade Equivalency Assessments;
- Determining Journeyperson-to-Apprentice ratios;
- Addressing compliance with legislation (OCTAA) and regulations; and,
- Promoting the skilled trades and conducting research.

For any matters related to your membership in the Apprentices class, you must contact the College of Trades directly at: (647) 847-3000 or toll free at: 1(855) 299-0028.

Ministry of Training, Colleges and Universities
Is responsible for:

- Registering Training Agreements;
- Approving which persons may provide apprenticeship training;
- Approving Training Delivery Agents;
- Issuing Certificates of Apprenticeship;
- Administering Certificate of Qualification examinations;
- Promoting skilled trades and apprenticeship;
- Conducting policy development, evaluation and research; and,
- Passing regulations.

For any matter related to your Registered Training Agreement or completing your apprenticeship, you must contact your Local Apprenticeship Office at the Ministry of Training, Colleges and Universities.

Roles and Responsibilities of the Apprentice

An Apprentice is an individual who has entered into an Registered Training Agreement with a Sponsor to receive training in a trade as part of an apprenticeship program established by the College of Trades.

As an Apprentice, you have certain roles and responsibilities to follow throughout your apprenticeship training:

Steps:

1. You must become a member of the College of Trades Apprentices Class and maintain your membership in good standing while you complete your training. For more information on membership, please visit the College of Trades website at: collegeoftrades.ca

2. As an Apprentice, you are responsible for completing skills or skill sets in this Log Book and ensuring that they are dated and signed by both you and your Trainer.

3. You must also ensure your Skill Set Completion Form is completed and signed by your current Sponsor once you have demonstrated competence in all the mandatory skills in this Log Book. Once this is done, we recommend you submit the Log Book to your local Ministry of Training, Colleges and Universities office.

4. You are responsible for informing the staff at your local Ministry of Training, Colleges and Universities 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.

5. You must present the Apprentice Completion Form (Please refer to Appendix B), once all unshaded skills and skill sets have been completed within this document, along with your authorized Log Book to your local Ministry of Training, Colleges and Universities office.

Roles and Responsibilities of Sponsors and Trainers

Log Books identify the on-the-job skills required for a trade and its related training program.

This Log Book has been written in concise statements which describe how well an Apprentice must perform each skill in order to become competent. Competence means being able to perform to the required standard.

By using this Log Book, Trainers will be able to ensure that the Apprentice is developing skills detailed for the trade.

Trainers and Apprentices are required to sign off and date the skills following each successful acquisition.

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.

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.

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, employees and the public. Therefore, it is imperative that all parties become aware of circumstances that may lead to injury or harm. Safe learning experiences and environments can be created by controlling the variables and behaviours that may contribute to or cause an accident or injury.

It is generally recognized that a safe attitude contributes to an accident free environment. Everyone will benefit as a result of a healthy attitude towards prevention of accidents.

A worker is possibly exposed to more hazards than any other person in the work force and, therefore, should be familiar with and apply Occupational Health and Safety Act and Regulations dealing with personal safety and the personal safety rules applying to each task.

Legal and Administrative Aspects of Safety:

Accident prevention and the provisions of safe working conditions are the responsibilities of an employer and employee.

Employer's Responsibilities - The employer is responsible for:

- Providing and maintaining safety equipment and protective devices;
- Ensuring proper safe work clothing and personal protective equipment (PPE) is worn;
- Enforcing safe working procedures;
- Providing safeguards for machinery, equipment and tools;
- Observing all accident prevention regulations; and,
- Training employees in the safe use and operation of equipment.

Employee's Responsibilities - The employee is responsible for:

- Working in accordance with the safety regulations pertaining to the job environment;
- Working in such a way as not to endanger themselves or fellow employees and the public.

Workplace Health and Safety's Responsibilities:

- Workplace Health and Safety (Ontario's Ministry of Labour) will conduct periodic inspections of the workplace to ensure that safety regulations for industry are being observed.

APPRENTICESHIP PROGRAM SUMMARY

Scope of Practice

The Scope of Practice for the trade of Welder is set out in section 54 of Ontario Regulation 276/11 under OCTAA and reads as follows:

The scope of practice for the trade of welder includes the following:

1. Using and maintaining tools, material handling equipment and welding equipment.
2. Preparing the work site.
3. Laying out, cutting and forming metals to specification.
4. Fitting sub-assemblies and assemblies together and preparing assemblies for welding.
5. Welding using the shielded metal arc welding, gas metal arc welding, gas tungsten arc welding, flux cored or metal cored arc welding, submerged arc welding and plasma arc welding processes.
6. Carrying out special processes such as welding studs and brazing.
7. Controlling for quality before, during and after welding. O. Reg. 276/11, s. 54.

While the Log Book draws on the scope of practice regulation (54 of Ontario Regulation 276/11 under OCTAA). The Log Book 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 **5,280** hours as the duration necessary for any Apprentice to become competent in the skills required. There may be circumstances in which the duration varies from this guideline.

Classroom 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.

Journeyperson to Apprentice Ratio
While some of the trades regulated under OCTAA are subject to Journeyperson to Apprentice ratios (ratios) set out in regulation, this trade is not one of them. Instead, industry has recommended a Journeyperson to Apprentice ratio guideline of 1 Journeyperson (or individuals who are deemed equivalent to a journeyperson status) to 1 Apprentices as the ratio necessary for an Apprentice to be properly trained on the job in this program.

Compulsory and Voluntary Classification

Regulations under OCTAA set out the regulated trades in Ontario and the classification of each trade as either “compulsory” or “voluntary.” The trade of Welder is voluntary.

Eligibility for Apprenticeship Program Completion

The Apprentice must:

- Achieve competency in all mandatory (unshaded) skills as identified in the Log Book
- Complete the in-school training as outlined in the industry and Ministry of Training, Colleges and Universities approved Curriculum Standard

It is the responsibility of an Apprentice to maintain a training record in the form of an Ontario College of Trades Apprenticeship Training Standard Log Book. The Sponsor and Trainer are required to sign off when competencies in the trade are achieved.

ESSENTIAL SKILLS SUMMARY

Essential skills are needed for work, learning and life. They provide the foundation for learning all other skills and enable people to evolve with their jobs and adapt to workplace change. Through extensive research, the Government of Canada and other national and international agencies have identified and validated nine essential skills. These skills are used in nearly every occupation and throughout daily life in different ways.

A series of tools endorsed by the Canadian Council of Directors of Apprenticeship (CCDA) have been developed to support apprentices in their training and to be better prepared for a career in the trades. The tools can be used independently or with the assistance of a tradesperson, trainer, employer, teacher or mentor to:

- Understand how essential skills are used in the trades;
- Learn about individual essential skills strengths and areas for improvement, and,
- Improve essential skills and increase success in an apprenticeship program.

A link to the complete essential skills profile for Red Seal trades can be found at red-seal.ca.

TRAINING THE APPRENTICE

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 habits;
- Use your Apprenticeship Log Book as a journal to keep track of the skills you have achieved;
- Listen to the suggestions of your Trainer;
- Discuss your training needs with your Sponsor;
- Review your training plan with your Training Consultant, Trainer, or Sponsor;
- 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. Once a 'set of skills' have been signed off, ensure your Sponsor signs off this area as well.

Sponsor

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.

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.);
- Encourage safe work habits;
- Provide time for the Trainer to 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;
- Set out clear expectations, and recognize good performance;
- Involve both the Apprentice and Trainer in developing the training plan and observe frequently;
- Provide constructive feedback and conduct regular performance reviews involving the Apprentice and Trainer;
- Use the Log Book 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.

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 a member of the College of Trades Journeypersons Class.
In voluntary trades, a Trainer is an individual who holds one of the following:

- A valid Certificate of Qualification and is a member of the College of Trades Journeypersons Class; or,
- Holds a Statement of Membership in the College of Trades Tradespersons Class; or,
- Holds a Certificate of Qualification previously issued by Ministry of Training, Colleges and Universities; or,
- Holds 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 (eligible to apply to College membership in the Journeypersons or Tradespersons Classes) or has the skills outlined in the Log Book.

A classroom instructor is not permitted to sign off the skills contained within this Log Book.

In this trade a trainer must be competent in the skill, but it is not mandatory to be a member of the College of Trades or have a Certificate of Qualification (CofQ).

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 Log Book with the Apprentice and develop a training plan;
- Set out clear expectations and recognize good performance;
- Ensure that the Apprentice receives on-the-job trade training experience as outlined in this document;
- Encourage and respond to all questions;
- Be patient;
- Explain, show and demonstrate the skill;
- Provide continuous feedback;
- Sign off skills when your Apprentice demonstrates competency, and,
- Use the Log Book as a guide to evaluate competence in each skill area. By using the Log Book, Trainers will be able to ensure that the Apprentice is developing skills outlined in this document.

NOTICE OF COLLECTION OF PERSONAL INFORMATION

1. At any time during your apprenticeship training, you may be required to show this Log Book to the Ministry of Training, Colleges and Universities. You will be required to submit the signed Apprenticeship Completion form to the Ministry of Training, Colleges and Universities in order to complete your program. The Ministry of Training, Colleges and Universities 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 Ministry of Training, Colleges and Universities will disclose information about your program completion and your Certificate of Apprenticeship to the Ontario College of Trades, as it is necessary for the College of Trades to carry out its responsibilities.

3. Your personal information is collected, used and disclosed by the Ministry under the authority of the *Ontario College of Trades and Apprenticeship Act, 2009*.

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 Training, Colleges and Universities
   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.

COMPETENCY ANALYSIS PROFILE
WELDER 456A
(All unshaded skill sets must be demonstrated/completed)
NOTE: For Skill Sets 6007.0 to 6012.0, 3 out of 6 must be completed

SKILL SETS	***SKILLS***				
USE AND MAINTAIN TOOLS & EQUIPMENT **6000.0**	Use and maintain metal working and trade specific hand tools and associated equipment 6000.01	Use and maintain electrical, pneumatic and hydraulic power tools & associated equipment and supplies 6000.02	Use shop and metal forming equipment 6000.03	Use and maintain measuring devices and layout equipment 6000.04	
USE AND MAINTAIN MATERIAL HANDLING AND SAFETY EQUIPMENT **6001.0**	Select and inspect rigging equipment 6001.01	Position and employ rigging 6001.02	Select and inspect hoisting and lifting equipment 6001.03	Operate hoisting equipment 6001.04	Select, inspect and erects scaffolding 6001.05
	Work on scaffolding and at heights 6001.06	Dismantle and stores scaffolding 6001.07			
MAINTAIN WELDING EQUIPMENT AND SUPPLIES **6002.0**	Maintain oxy-fuel equipment 6002.01	Maintain arc welding equipment 6002.02	Store welding consumables 6002.03		
PREPARE WORK SITE **6003.0**	Plan work site layout 6003.01	Set up work area 6003.02	Communicate/ consult with supervisor, technical advisor and other workers 6003.03		
LAY OUT, CUT AND FORM METALS TO SPECIFICATION **6004.0**	Prepare job layout 6004.01	Cut and gouge metal with oxy-fuel equipment 6004.02	Cut metal with arc-air equipment 6004.03	Cut metal with SMAW cutting equipment 6004.04	Cut metal with plasma arc equipment 6004.05
	Cut metal using hand tools 6004.06	Cut metal using power tools 6004.07	Form metal to specified design 6004.08	Prepare welding joints 6004.09	Select material preparation method 6004.10

FIT SUB-ASSEMBLIES AND ASSEMBLIES **6005.0**	Make jigs, fixtures and templates with or without actual components 6005.01	Check measurements and fit of components 6005.02	Pre-heat components or assembly 6005.03	Perform tack welding 6005.04	Plan for the control of distortion 6005.05
PREPARE ASSEMBLY FOR WELDING **6006.0**	Plan sequence of operations 6006.01	Verify fabricated materials and assemblies 6006.02	Prepare job for welding 6006.03	Ensure correct consumables are on hand 6006.04	Check weld joint fit up, tack welds and fixture condition 6006.05
	Check that joints to be welded are clean and dry 6006.06				
WELD WITH THE SHIELDED METAL ARC WELDING (SMAW) "stick" PROCESS **6007.0**	Select and set up welding equipment 6007.01	Install electrode 6007.02	Adjust and verify welding process parameters 6007.03	Fillet weld using the SMAW "stick" process 6007.04	Groove weld using the SMAW "stick" process 6007.05
	Clean welds 6007.06	Measure welds for completeness 6007.07			
WELD WITH THE GAS METAL ARC WELDING (GMAW/MIG) PROCESS **6008.0**	Select and set up welding equipment 6008.01	Install consumables 6008.02	Adjust and verify welding process parameters 6008.03	Fillet weld using the GMAW/ MIG process 6008.04	Groove weld using the GMAW/ MIG process 6008.05
	Clean welds 6008.06	Measure welds for completeness 6008.07			

WELD WITH THE GAS TUNGSTEN ARC WELDING (GTAW/TIG) PROCESS **6009.0**	Select and set up welding equipment 6009.01	Install consumables 6009.02	Adjust and verify welding process parameters 6009.03	Fillet weld using the GTAW/ TIG process 6009.04	Groove weld using the GTAW/ TIG process 6009.05
	Clean welds 6009.06	Measure welds for completeness 6009.07			
WELD WITH FLUX CORED (FCAW) OR METAL CORED (MCAW) ARC WELDING **6010.0**	Select and set up welding equipment 6010.01	Install consumables 6010.02	Adjust and verify welding process parameters 6010.03	Fillet weld using the FCAW or MCAW process 6010.04	Groove weld using the FCAW or MCAW process 6010.05
	Clean welds 6010.06	Measure welds for completeness 6010.07			
WELD WITH SUBMERGED ARC WELDING (SAW) PROCESS **6011.0**	Install consumables 6011.01	Adjust and verify welding process parameters 6011.02	Fillet weld using the SAW process 6011.03	Groove weld using the SAW process 6011.04	Clean welds 6011.05
	Measure welds for completeness 6011.06				
WELD WITH THE PLASMA ARC WELDING (PAW) PROCESS **6012.0**	Set up welding equipment 6012.01	Install consumables 6012.02	Adjust welding parameters 6012.03	Groove weld using the PAW process 6012.04	Clean welds 6012.05
	Measure welds for completeness 6012.06				

BRAZE METAL **6013.0**	Select and configure oxy-fuel-gas heating equipment 6013.01	Obtain consumables 6013.02	Braze lap and tee joints 6013.03	Carry out shut down procedure 6013.04	
WELD STUDS **6014.0**	Select and set up welding equipment 6014.01	Install consumables 6014.02	Weld studs 6014.03	Remove ferrules from welded studs 6014.04	Repair a failed weld 6014.05
CONTROL FOR QUALITY WHILE WELDING **6015.0**	Comply with company quality control standards, customer standards and code requirements 6015.01	Ensure ongoing weld quality 6015.02	Benchmark weld quality 6015.03		
CARRY OUT POST-WELD QUALITY CONTROL **6016.0**	Visually inspect welds 6016.01	Perform post-weld product control of weldment temperature 6016.02	Correct excessive welding distortion 6016.03	Perform any non-destructive check 6016.04	Prepare weld samples and perform destructive tests 6016.05
DEMONSTRATE SAFE WORKING PRACTICES AND PROCEDURES **6017.0**	Identify and take corrective action against potential workplace health and safety hazards 6017.01	Handle, store and dispose of hazardous workplace materials 6017.02	Comply with workplace legislation relating to health & safety 6017.03	Wear and maintain personal protective equipment 6017.04	Practice good housekeeping in the workplace 6017.05

NOTE ON WELDING PROCESS OPTIONS:

There are six welding process performances that may be completed in the apprenticeship (see Training Units 6007.0 – 6012.0). The apprentice is required to complete at least three of them. If the apprentice plans to take the Certificate of Qualification examination (Red Seal), there is a requirement that he/she have an all-position welding certificate in Shielded Metal Arc Welding ("stick" welding) in order to be approved to write the examination.

6000.0 USE AND MAINTAIN TOOLS & EQUIPMENT

GENERAL PERFORMANCE OBJECTIVE

Select, inspect, use and maintain hand tools, power tools, shop and metal forming equipment and measuring devices by using and maintaining metal working and trade specific hand tools and associated equipment; using and maintaining electrical, pneumatic and hydraulic power tools and associated equipment and supplies; using and maintaining shop and metal forming equipment and using and maintaining measuring devices and layout equipment so that tools and equipment are used for their intended purpose and are maintained at a standard of repair that is safe and functionally effective.

SKILLS

6000.01 Use and maintain metal working and trade specific hand tools and associated equipment including cutting, filing, grinding, fitting, scaling and weld inspection tools by determining the correct tool for the job, selecting the tool and required components, documenting use in a tool control system, setting up the tool, testing it, applying it to the job, monitoring its performance, adjusting its operation as necessary, monitoring operation of the tool, identifying deficiencies, replacing consumables and repairing or replacing user maintainable parts so that tools are used for their intended purpose and are maintained at a standard of repair that is safe and functionally effective.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

◊ A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor

6000.02 Use and maintain electrical, pneumatic and hydraulic power tools and associated equipment and supplies including drills, saws, grinders and scalers by identifying appropriate power supply sources, ensuring sufficient power, maintaining integrity of power supply, reporting inadequate power supply, determining the correct tool for the job, selecting the tool and required components, setting up the tool, actuating and testing it, applying it to the job, monitoring its performance, adjusting its operation as necessary, identifying operational deficiencies, replacing consumables and repairing or replacing user maintainable parts so that tools are used for their intended purpose and are maintained at a standard of repair that is safe and functionally effective.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6000.03 Use shop and metal forming equipment including shears, rollers and nibblers by ensuring appropriate power supply is available, maintaining integrity of power supply, reporting inadequate power supply, determining the correct equipment for the job, selecting the equipment and required components, setting up the equipment, actuating and testing it, applying it to the job, monitoring its performance and adjusting its operation as necessary, identifying operational deficiencies, replacing consumables and repairing or replacing user maintainable parts so that equipment is used for its intended purpose and is maintained at a standard of repair that is safe and functionally effective.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6000.04 Use and maintain measuring devices and layout equipment including measuring tapes, scales, dividers, markers by determining the correct device or equipment for the job, selecting the device and required components, setting up the device, testing it, applying it to the job, monitoring its performance and adjusting its operation as necessary, identifying deficiencies, replacing consumables and repairing or replacing user maintainable parts so that tools are used for their intended purposes and are maintained at a standard of repair that is safe and functionally effective.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6000: USE AND MAINTAIN TOOLS & EQUIPMENT		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6001.0 USE AND MAINTAIN MATERIAL HANDLING AND SAFETY EQUIPMENT

GENERAL PERFORMANCE OBJECTIVE

Use and maintain material handling and safety equipment by selecting and inspecting rigging; positioning, employing and identifying rigging for repair; selecting and inspecting hoisting equipment; operating hoisting equipment; selecting, inspecting and erecting scaffolding; working on scaffolding and at heights; dismantling and storing scaffolds and material handling equipment so that the rigging is appropriate to the job and is used and stored correctly, lifting and hoisting equipment is adequate for the job, the lift is correctly carried out and scaffolding is erected, used, dismantled and stored properly in accordance with employer's procedures and CSA safety standards.

SKILLS

6001.01 Select and inspect rigging equipment by choosing appropriate equipment required for the specific lift including cable clamps, chain block hoists, chains, chokers, come-along, connectors, ropes, slings and tuggers; performing preoperational check of rigging through visual checks for defects including damaged links, frayed cables, cuts in slings, threads on shackles, and other physical defects and replacing or identifying for repair defective rigging so that rigging is correct for the job per Ontario regulation requirements and defective rigging is replaced or identified for repair in accordance with employer's procedures and CSA safety standards.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

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6001.02 Position and employ rigging by determining the weight, balance and size of workpiece to be moved or lifted; placing or attaching the rigging to the load and dismantling and storing the rigging equipment after use so that correct rigging is selected, placed and used to move and/or lift the workpiece, and is stored correctly and in good repair in compliance with employer's procedures, CSA safety standards, Ontario regulations and material handling guidelines.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6001.03 Selects and inspects hoisting and lifting equipment by; selecting equipment required including forklift, jib-crane, overhead hoist, portable boom and spreader bars; performing pre operational inspection of hoisting and lifting equipment by visually checking the cables and chains for defects including damaged links and frayed cables and identifying defective equipment so that the equipment is adequate for the job as per Ontario regulation requirements and defective hoisting and lifting equipment is identified for repair or replacement in accordance with CSA safety standards, Ontario regulations and manufacturer's procedures.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6001.04 Operate hoisting equipment by moving and lifting workpieces using material handling tools and equipment; communicating with other workers using hand and voice signals and storing hoisting equipment so that correct lifting and moving procedures are used in accordance with employer's procedures, manufacturer's specifications, CSA safety standards or Ontario regulation requirements.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6001.05 Select, inspect and erect scaffolding by selecting scaffolding for the specific job; performing pre-use inspection by visually checking all of the components for defects and erects scaffolding ensuring it is sufficient for the task, has no visual defects, is placed on a firm footing in accordance with employer's procedures, manufacturer's specifications, CSA safety standards or Ontario regulation requirements.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6001.06 Work on scaffolding and at heights by selecting and utilizing a fall protection system, wearing the appropriate fall protection equipment and following fall protection procedures as required by employer's procedures, CSA safety standards and Ontario regulation requirements.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6001.07 Dismantle and store scaffolding by disassembling scaffolding and storing it correctly and in good repair as per employer procedures and/or Ontario regulation requirements.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6001: USE AND MAINTAIN MATERIAL HANDLING AND SAFETY EQUIPMENT		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6002.0 MAINTAIN WELDING EQUIPMENT AND SUPPLIES

GENERAL PERFORMANCE OBJECTIVE

Maintain welding equipment and supplies by inspecting, testing, checking, identifying and reporting deficiencies; adjusting, repairing and replacing user maintainable defective components associated with oxy-fuel equipment and storing components and consumables associated with oxy-fuel and arc welding equipment so that equipment and consumables are stored and maintained at a standard of repair that is safe and functionally effective.

SKILLS

6002.01 Maintain oxy-fuel equipment by inspecting, testing, checking, identifying and reporting deficiencies; adjusting, repairing and replacing user maintainable defective components associated with oxy-fuel equipment including cylinders, gauges, hoses, tips, torches, and flashback arresters using leak detection solutions, oil & grease removers, wrenches, tip cleaners and hose clamps so that oxy-fuel equipment is maintained at a standard of repair that is safe and functionally effective within manufacturer's and workplace standards.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

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6002.02 Maintain arc welding equipment by inspecting, testing, checking, calibrating, adjusting and replacing defective components associated with arc welding equipment including welding cables, electrode holders, ground clamps, feeders & guns, flow meters, shielding gas hoses using pliers, wrenches and leak detection solutions so that welding equipment is maintained at a standard of repair that is safe and functionally effective within manufacturer's and workplace standards.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6002.03 Store welding consumables by storing, inspecting, maintaining storage conditions, protecting and replacing defective items associated with consumables for welding including ovens, quivers, flux storage containers, cylinders, electrodes, and wire using knowledge of manufacturer's recommendations so that welding consumables are stored and maintained free from contamination and damage in accordance with CSA, ASME or an equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6002: MAINTAIN WELDING EQUIPMENT AND SUPPLIES		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6003.0 PREPARE WORK SITE

GENERAL PERFORMANCE OBJECTIVE

Prepare work site by planning work site lay out, setting up work area and communicating with supervisors and other workers so that work space is efficiently used, worker time and motion are reduced, work can proceed in a safe and orderly manner and communications eliminate or reduce confusion and errors.

SKILLS

6003.01 Plan work site layout by identifying work site variables; extracting site relevant details from information sheets, drawings and specifications; taking into account effects on site layout of concurrent operations and determining work site layout and space usage so that work can proceed in a safe and orderly manner.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

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6003.02 Set up work area by positioning equipment, machines and tools; identifying site relevant safety concerns and removing or avoiding hazards and occupying available work space so that there are sufficient lighting and ventilation, reduced interference from competing work activities, safe and efficient movement in the work space, sequence of operations is effective and non-productive activities are minimized.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6003.03 Communicate/consult with supervisor, technical advisor and other workers to ensure that the types of metals to be joined and the geometry of prepared shapes are as specified by shop drawings, the shop supervisor or the customer.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6003: PREPARE WORK SITE		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6004.0 LAY OUT, CUT AND FORM METAL TO SPECIFICATION

GENERAL PERFORMANCE OBJECTIVE

Lay out, cut and form metal to specification by preparing job layout; cutting metal to size using one of several processes; forming metal to required design; preparing welding joints and selecting material preparation method so that the finished product meets the requirements of the job specification.

SKILLS

6004.01 Prepare job layout by reading and interpreting fabrication documents, blue prints and drawings; identifying dimensions, materials, tolerances, notes and symbols; making rough sketches of fabrication job; selecting required stock and transferring dimensions to job layout so that layout is completed in accordance with fabrication documents and with efficient use of materials.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

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6004.02 Cut metal with oxy-fuel equipment by selecting fuel gases, tips, pressures required, personal equipment and tools and assembling them; activating the equipment; making straight line, circle, bevel and piercing cuts and shutting down the equipment so that equipment is set up and used in accordance with manufacturer's instructions for the intended application and the cut is made to specification.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6004.03 Cut and gouge metal with air carbon arc equipment by selecting power source, electrodes, pressurized air, personal equipment and tools and assembling them; activating the equipment; making the required cut and shutting down the equipment so that equipment is set up and used in accordance with manufacturer's instructions for the intended application and the cut is made to specification.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6004.04 Cut metal with SMAW cutting equipment by selecting power source, electrodes, amperage and polarity setting, personal equipment and tools and assembling them; activating the equipment; making the required cut and shutting down the equipment so that equipment is set up and used in accordance with manufacturer's instructions for the intended application and the cut is made to specification.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6004.05 Cut metal with plasma arc equipment by selecting orifice size, gas, gas pressure and heat settings, personal equipment and tools and assembling them; activating the equipment; making straight line, circle, bevel and piercing cuts and shutting down the equipment so that equipment is set up and used in accordance with manufacturer's instructions for the intended application and the cut is made to specification.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6004.06 Cut metal using hand tools including hacksaws, snips, chisels, reamers, hand shears and pipe cutters by selecting the tool; checking the tool's operation and condition and making the required cut so that the tool is appropriate to the job; the tool is in good working condition; the tool is operated properly in accordance with manufacturer's recommendations and the cut is made to specification.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6004.07 Cut metal using power tools including power shears, power saws, grinders, nibblers, notchers and punching machines by selecting the tool; installing consumables; adjusting the power tool's scope of operation; checking the power tool's performance and condition and making the required cut so that the tool is appropriate to the job; the tool is properly adjusted and in good working condition; the tool is operated properly in accordance with manufacturer's recommendations and the cut is made to specification.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
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6004.08 Form metal to specified design using equipment such as rollers, benders, crimpers and beaders by selecting the equipment; adjusting the equipment's scope of operation; checking the equipment's performance and condition and applying the equipment to the work so that equipment is appropriate to the job; the equipment is properly adjusted and in good working condition; the equipment is operated properly in accordance with manufacturer's recommendations and the operation is done to specification.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
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6004.09 Prepare welding joints by using equipment such as grinders and beveling machines so that weldment edges meet the requirements of the welding specification.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
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6004.10 Select material preparation method such as flame cutting, grinding or nibbling so that distortion of components is minimized.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6004: LAY OUT, CUT AND FORM METAL TO SPECIFICATION		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6005.0 FIT SUB-ASSEMBLIES AND ASSEMBLIES

GENERAL PERFORMANCE OBJECTIVE

Fit sub-assemblies and assemblies by making jigs, fixtures and templates; checking measurement and fit of components; pre-heating components or assemblies; performing tack welding and planning for control of distortion so that measurements are within tolerances allowed, assemblies are dimensionally stable and fitting/ tacking facilitates welding.

SKILLS

6005.01 Make jigs, fixtures and templates with or without actual components by identifying requirements from drawings and plans; creating jigs and fixtures to ensure materials are aligned and held in position for welding and creating templates to layout patterns so that the jigs, fixtures and templates are effective in maintaining dimensional stability during and after welding.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
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6005.02 Check measurements and fit of components by performing trial fit of assemblies; using measuring tools and layout equipment to correct errors in alignment and measurement so that linear and geometric measurements are within the tolerances required by drawings, specifications or standards.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6005.03 Pre-heat components or assembly by selecting preheat equipment and measuring devices; planning preheat sequence and procedure; applying heat so that work is prepared for assembly and interpass temperatures are maintained without causing distortion or excessive residual stresses.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6005.04 Perform tack welding by applying the correct tacking sequence so that intended root openings are maintained and do not impede the weld process.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6005.05 Plan for the control of distortion by applying stiffeners, presetting parts, using back to back (neutral axis) assembly of similar components and flame straightening or cold straightening prior to tacking so that distortion is limited.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6005: FIT SUB-ASSEMBLIES AND ASSEMBLIES		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6006.0 PREPARE ASSEMBLY FOR WELDING

GENERAL PERFORMANCE OBJECTIVE

Prepare assembly for welding by planning sequence of operations; verifying fabricated materials and assemblies; preparing the job for welding; ensuring correct consumables are on hand and checking weld joint fit up and condition so that the assembly is prepared to meet the preconditions for welding, allowing the job to be carried out efficiently and effectively without wasting time or resources.

SKILLS

6006.01 Plan sequence of operations by reading and interpreting weld procedure specifications, employer's procedures, data sheets, codes, standards or contract documents; confirming dimensions, materials, tolerances, notes, symbols, weld sizes and locations; determining adequacy of weld preparation and type and size of weld consumables; confirming pre-heat interpass and post heat requirements, welding process(s), parameters and electrical characteristics; identifying sequence of operation and inspection requirements so that the sequence of operations minimizes distortion and prevents avoidable repetition, waste and unacceptable quality of welds.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

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6006.02 Verify fabricated materials and assemblies by obtaining all required materials and assemblies as described on the blue print or the bill of materials; verifying through stamping or other identification processes or systems; verifying that lifting equipment, positioning equipment, jigs and/or fixtures, preheat gear, preheat monitoring gear, welding power source and attachments (feeders), fume extraction equipment, air power tools and electrical power tools are available and obtain if necessary so that materials classification, size and condition are correct.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6006.03 Prepare job for welding by ensuring the weldment can be manipulated safely and effectively; reporting to proper authority any discrepancies or errors for correction and carrying out any required pre-heating so that all welding and inspection operations can be completed as specified.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6006.04 Ensure correct consumables are on hand by reading and interpreting weld procedure specification documents or following directions of supervisor; identifying the correct welding consumable required; verifying location of welding consumable storage and the availability of electrode conditioning and storage ovens and electrode quivers if required so that all welding operations can be completed as specified to the level of efficiency required by the employer.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6006.05 Check that the weld joint fit up, tack weld locations and size and fixture condition are in accordance with the applicable welding specification or accepted shop practice.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6006.06 Check that joints to be welded are clean and dry in each weld location in accordance with the applicable weld specification or accepted shop practice.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6006: PREPARE ASSEMBLY FOR WELDING		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6007.0 *WELD WITH THE SHIELDED METAL ARC WELDING (SMAW) PROCESS

GENERAL PERFORMANCE OBJECTIVE

Weld with the shielded metal arc welding (SMAW) process by selecting power source and setting up welding equipment; installing electrode; adjusting welding process parameters; fillet welding; groove welding; cleaning welds and measuring welds so that processes are correctly completed in accordance with manufacturer's instructions and the applicable standard.

NOTE: *A minimum of three of the general performance objectives 6007.0 to 6012.0 must be fully signed off (i.e., all performance objectives must be completed)*.

SKILLS

6007.01 Select and set up welding equipment by selecting power source, welding cable assemblies, electrode holder, electrode type and size, personal equipment and tools, and assembling them so that all the equipment necessary to weld using the SMAW process is available and is correctly set up in accordance with manufacturer's instructions for the intended application.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

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6007.02 Install electrode by extracting requirements from the applicable welding procedure or following directions of supervisor; identifying the type and size of filler metal for the welding position, joint type, and the composition and thickness of the base material and mounting these consumables so that the correct electrode is installed in accordance with manufacturer's instructions for the intended application.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6007.03 Adjust and verify welding process parameters by choosing the equipment configuration which meets the specified requirements for size and quality of weld including testing the settings and adjusting the operation of the equipment so that the correct balance of penetration, fusion, profile and weld size is achieved for the welding application and that it meets the weld inspection requirements of the applicable fabrication standards such as; CSA, ASME or an equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6007.04 Fillet weld using the SMAW process on lap, corner and tee joints in all positions using plate, tube or pipe to plate assemblies of single or multiple passes, with any one of mild steel, stainless steel or other alloys in the work environment identified by the employer so that passes are done in the correct sequence and each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or an equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6007.05 Groove weld using the SMAW process on either flare and single bevel joints, square and single vee joints or 5G/6G pipe/tube, with solid backing, in all positions, using any one of mild steel, stainless steel or other alloys in the work environment identified by the employer so that passes are done in the correct sequence and each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard. ***NOTE***: Joints without solid backing may substituted for joints with solid backing.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6007.06 Clean welds using wire brush, descaler, grinder or other appropriate abrasive process so that welds are free of slag, scale surface irregularities and meet the weld inspection requirements of the applicable fabrication standards such as; CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6007.07 Measure welds for completeness using fillet gauges, measuring tape or other devices so that welds meet the requirements specified by the engineering drawings or company procedures and the applicable fabrication standards such as; CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6007: WELD WITH THE SHIELDED METAL ARC WELDING (SMAW) PROCESS		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6008.0 *WELD WITH THE GAS METAL ARC WELDING (GMAW) PROCESS

GENERAL PERFORMANCE OBJECTIVE

Weld with the gas metal arc welding (GMAW) process by selecting and setting up welding equipment; installing consumables; adjusting welding process parameters; fillet welding; groove welding; cleaning welds and measuring welds so that process operations are correctly performed in accordance with the weld procedure, equipment manufacturer's recommendations and the requirements of the applicable standard.

NOTE: ***A minimum of three of the general performance objectives 6007.0 to 6012.0 must be fully signed off (i.e., all performance objectives must be completed).***

SKILLS

6008.01 Select and set up welding equipment by selecting power source, feeder, welding cable assemblies, welding gun, gun liners, gas distributor, gas cup and seals, contact tubes, flow meter, purging equipment, personal equipment and tools, and assembling them so that all the equipment necessary to weld using the GMAW process is available and is correctly set up or installed in accordance with manufacturer's instructions for the intended application.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

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6008.02 Install consumables by extracting requirements from the applicable welding procedure or following directions of supervisor; identifying the correct shielding gas or gas mixture, purging equipment and the type and size of filler metal for the welding position, joint type, and the composition and thickness of the base material and mounting these consumables so that the correct gas and filler wire are installed in accordance with manufacturer's instructions for the intended application.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6008.03 Adjust and verify welding process parameters by choosing the equipment configuration which meets the specified requirements for size and quality of weld including voltage and wire feed speed, and shielding gas flow rate; purge flow rate and purge time; testing the settings and adjusting the operation of the equipment so that the correct balance of penetration, fusion, profile and weld size is achieved for the welding application and that it meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6008.04 Fillet weld using the GMAW process on lap and corner and tee joints in the flat and horizontal and vertical positions, using plate, tube or pipe to plate assemblies with any one of mild steel, stainless steel, aluminum or other alloys, in the work environment identified by the employer so that passes are done in the correct sequence and each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6008.05 Groove weld using the GMAW process on either flare and single bevel joints, square and single vee joints or 5G/6G pipe/tube, with backing, in the flat, horizontal and vertical positions, on plate or pipe using any one of; mild steel, stainless steel, aluminum or other alloys, in the work environment identified by the employer so that passes are done in the correct sequence and each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard. ***NOTE***: Joints without solid backing may substituted for joints with solid backing.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6008.06 Clean welds using wire brush, descaler, grinder or other appropriate abrasive process so that welds are free of slag, scale surface irregularities and meet the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6008.07 Measure welds for completeness using fillet gauges, measuring tape or other devices so that welds meet the requirements specified by the engineering drawings or company procedures and the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6008: WELD WITH THE GAS METAL ARC WELDING (GMAW) PROCESS		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6009.0 *WELD WITH THE GAS TUNGSTEN ARC WELDING (GTAW) PROCESS

GENERAL PERFORMANCE OBJECTIVE

Weld with the gas tungsten arc welding (GTAW) process by selecting and setting up welding equipment; installing consumables; adjusting welding process parameters; fillet welding; groove welding; cleaning welds and measuring welds so that processes are correctly completed in accordance with manufacturer's instructions and the applicable standard.

NOTE: ***A minimum of three of the general performance objectives 6007.0 to 6012.0 must be fully signed off (i.e., all performance objectives must be completed).***

SKILLS

6009.01 Select and set up welding equipment by selecting welding machine (power source), welding cable assemblies, welding torch, gas cup, gas screen, purging equipment, personal equipment and tools as required and assembling them so that all the equipment necessary to weld using the GTAW process is available and is correctly set up or installed in accordance with manufacturer's instructions.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

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6009.02 Install consumables by choosing the shielding gas, purging equipment and the type and size of filler rod, tungsten electrode type and size, shapes tungsten electrode for the welding application and the composition and thickness of the base material so that the correct shielding gas, tungsten and filler rod are installed in accordance with manufacturer's instructions or accepted shop practice.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6009.03 Adjust and verify welding process parameters by choosing the equipment configuration which meets the specified requirements for size and quality of weld including shielding gas flow rate; purge flow rate and purge time; testing the settings and adjusting the operation of the equipment so that the correct balance of penetration, fusion, profile and weld size is achieved for the welding application and that it meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6009.04 Fillet welds using the GTAW process on lap, corner and tee joints in all positions using plate, tube or pipe to plate assemblies using single or multiple passes, using any one of mild steel, stainless steel, aluminum or other alloys, in the work environment identified by the employer so that passes are done in the correct sequence and each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6009.05 Groove welds using the GTAW process on vee or tube/pipe joints with backing in all positions using plate or pipe assemblies by using single or multiple passes so that passes are done in the correct sequence, each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard. ***NOTE***: Joints without solid backing may substitute for joints with solid backing.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6009.06 Clean welds using wire brush, grinder or other appropriate abrasive process so that welds are free of oxides and meet the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6009.07 Measure welds for completeness using fillet gauges, measuring tape or other devices so that welds meet the requirements specified by the engineering drawings, company procedures and the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6009: WELD WITH THE GAS TUNGSTEN ARC WELDING (GTAW) PROCESS		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6010.0 *WELD WITH THE FLUX CORED OR METAL CORED ARC WELDING (FCAW OR MCAW) PROCESS

GENERAL PERFORMANCE OBJECTIVE

Weld with the flux cored/metal cored arc welding (FCAW, MCAW) process by selecting and setting up welding equipment; installing consumables; adjusting welding process parameters; fillet welding; groove welding; cleaning welds and measuring welds so that process operations are correctly performed in accordance with the weld procedure, equipment manufacturer's recommendations and the requirements of the applicable standard.

NOTE: ***A minimum of three of the general performance objectives 6007.0 to 6012.0 must be fully signed off (i.e., all performance objectives must be completed).***

SKILLS

6010.01 Select and set up welding equipment by selecting power source, feeder, welding cable assemblies, welding gun, gun liners, gas distributor, gas cup and seals, contact tubes, flow meter, personal equipment and tools, and assembling them so that all the equipment necessary to weld using the FCAW/MCAW process is available and is correctly set up or installed in accordance with manufacturer's instructions for the intended application.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

◊ A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor

6010.02 Install consumables by interpreting the applicable welding procedure or following directions of supervisor; identifying the correct shielding gas and the type and size of filler metal for the welding position, joint type, and the composition and thickness of the base material and mounting these consumables so that the correct gas and filler wire are installed in accordance with manufacturer's instructions for the intended application.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6010.03 Adjust and verify welding process parameters by choosing the equipment configuration which meets the specified requirements for size and quality of weld including voltage and wire feed speed and shielding gas flow rate; testing the settings and adjusting the operation of the equipment so that the correct balance of penetration, fusion, profile and weld size is achieved for the welding application and that it meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6010.04 Fillet weld using the FCAW or MCAW process on lap, corner and tee joints in the flat, horizontal and vertical positions using plate, tube or pipe to plate assemblies and single or multiple passes, using any one of mild steel, stainless steel or other alloys, in the work environment identified by the employer so that passes are done in the correct sequence and each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6010.05 Groove weld using the FCAW or MCAW process with full penetration on either flare and single bevel joints or square and single vee joints, either back gouged or with backing, in the flat, horizontal and vertical positions, using mild steel, stainless steel, or other alloys, in the work environment identified by the employer so that passes are done in the correct sequence and each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6010.06 Clean welds using wire brush, descaler, grinder or other appropriate abrasive process so that welds are free of slag, scale surface irregularities and meet the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6010.07 Measure welds for completeness using fillet gauges, measuring tape or other devices so that welds meet the requirements specified by the engineering drawings or company procedures and the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6010: WELD WITH THE FLUX CORED OR METAL CORED ARC WELDING (FCAW OR MCAW) PROCESS		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6011.0 *WELD WITH THE SUBMERGED ARC WELDING (SAW) PROCESS

GENERAL PERFORMANCE OBJECTIVE

Weld with the submerged arc welding (SAW) process by installing consumables; adjusting welding parameters; fillet welding; groove welding; cleaning welds and measuring welds so that process operations are correctly performed in accordance with the equipment manufacturer's recommendations and the requirements of the applicable standard.

NOTE: ***A minimum of three of the general performance objectives 6007.0 to 6012.0 must be fully signed off (i.e., all performance objectives must be completed).***

SKILLS

6011.01 Install consumables by extracting requirements from the applicable welding procedure or following directions of supervisor; identifying the correct type and size of electrode, type of flux, guide and contact tube sizes for the welding position, joint type, and the composition and thickness of the base material and mounting these consumables so that the correct flux and filler metal are installed in accordance with manufacturer's instructions for the intended application.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

◊ A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor

6011.02 Adjust and verify welding process parameters by choosing the equipment configuration which meets the specified requirements for size and quality of weld including voltage, wire feed speed and flux; testing the settings and adjusting the operation of the equipment so that the correct balance of penetration, fusion, profile and weld size is achieved for the welding application and that it meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6011.03 Fillet weld using the SAW process on lap and tee joints in the flat and horizontal positions, using mild steel or stainless steel in the work environment identified by the employer so that passes are done in the correct sequence and each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6011.04 Groove weld using the SAW process on full penetration single or double bevel or Vee or U joints, with solid backing in the flat position, using mild steel or stainless steel in the work environment identified by the employer so that passes are done in the correct sequence and each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6011.05 Clean welds using wire brush, descaler, grinder or other appropriate abrasive process so that welds are free of slag, scale surface irregularities and meet the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6011.06 Measure welds for completeness using fillet gauges, measuring tape or other devices so that welds meet the requirements specified by the engineering drawings or company procedures and the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6011: WELD WITH THE SUBMERGED ARC WELDING (SAW) PROCESS		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6012.0 *WELD WITH THE PLASMA ARC WELDING (PAW) PROCESS

GENERAL PERFORMANCE OBJECTIVE

Weld with the plasma arc welding (PAW) process by setting up welding equipment; installing consumables; adjusting welding parameters; fillet welding; groove welding; cleaning welds and measuring welds so that processes are correctly completed in accordance with manufacturer's instructions and the applicable standard.

NOTE: *A minimum of three of the general performance objectives 6007.0 to 6012.0 must be fully signed off (i.e., all performance objectives must be completed).*

SKILLS

6012.01 Set up welding equipment by configuring welding machine (power source), welding cable assemblies, welding torch, gas cup, shielding gas types, purging equipment, tungsten electrode type and size and assembling them so that all the equipment necessary to weld using the PAW process is available and is correctly set up or installed in accordance with manufacturer's instructions.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

◊ A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor

6012.02 Install consumables by choosing the shielding gases, purging equipment and the type and size of filler rod for the welding application and the composition and thickness of the base material so that the correct gases and filler rod are deployed in accordance with manufacturer's instructions.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6012.03 Adjust welding parameters by connecting the power source to the available power supply; connecting the worklead clamp to bare metal on the component to be welded; selecting the correct polarity; adjusting current, purge flow rate and purge time and gas flow rates by following either written or verbal instructions; testing the settings and adjusting the operation of the equipment so that the correct balance of penetration, fusion, profile and weld size is achieved for the weld and that it meets the requirements of the applicable standards including CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6012.04 Groove weld using the PAW process on single bevel or square or single vee joints, with backing, in the flat, horizontal and vertical positions, using any one of mild steel, stainless steel, aluminum or other alloys, in the work environment identified by the employer so that passes are done in the correct sequence and each pass of the weld meets the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6012.05 Clean welds using wire brush, grinder or other appropriate abrasive process so that welds are free of oxide and surface irregularities and meet the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6012.06 Measure welds for completeness using fillet gauges, measuring tape or other devices so that welds meet the requirements specified by the engineering drawings, company procedures and the applicable standards including C.S.A., ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6012: WELD WITH THE PLASMA ARC WELDING (PAW) PROCESS		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6013.0 BRAZE METAL

GENERAL PERFORMANCE OBJECTIVE

Braze deoxidized copper with the oxy-fuel-gas(OFG) process by selecting and configuring oxy-fuel-gas apparatus; obtaining consumables; brazing lap and tee joints and carrying out shut down procedures so that process operations are correctly performed in accordance with the equipment manufacturer's recommendations and the requirements of the applicable standard.

SKILLS

6013.01 Select and configure oxy-fuel-gas heating equipment by selecting torch, heating tip, filler alloy type and diameter, flux type, adjusting gas pressures selecting personal equipment and tools, and assembling them so that all the equipment necessary to braze deoxidized copper using the oxy-fuel-gas (OFG) process is available and is correctly set up in accordance with manufacturer's instructions for the intended application.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

◊ A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor

6013.02 Obtain consumables by determining the applicable brazing procedure or following directions of supervisor; identifying the type and size of filler metal and flux type so that the correct consumables are available for the intended application in accordance with the brazing procedure specification or applicable standards.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6013.03 Braze lap and tee joints by choosing the equipment configuration including fuel gas, oxygen pressures and heating tip sizes; testing the settings and adjusting the operation of the equipment; preparing the joint ; preheating the joint and adding the filler alloy so that the correct combination of penetration, fill and flow of filler alloy through the joint is achieved, the correct joint profile and size are achieved for the brazing application and that it meets the inspection requirements of the applicable fabrication standards such as ASME or an equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6013.04 Carry out shut down procedure by storing heating equipment, post cleaning braze joint assemblies, removing residual fluxes so that the joint is capable of performing in the intended service environment.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6013: BRAZES METAL		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6014.0 WELD STUDS

GENERAL PERFORMANCE OBJECTIVE

Weld with stud welding process by selecting and setting up welding equipment; installing consumables; welding studs; removing ferrules; inspecting and testing welds and repairing failed welds so that the process operations are correctly performed in accordance with the weld procedure, the equipment, the stud manufacturer's recommendations and the requirement of the applicable standard.

SKILLS

6014.01 Select and set up welding equipment by selecting power source, weld gun, stud, ferrule, personal equipment and tools, and assembles them so that all the equipment necessary to weld using the stud welding process is available and is correctly set up or installed in accordance with the manufacturer's instructions for the intended application.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

◊ A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor

6014.02 Install consumables by extracting requirements from the applicable welding procedure or following directions of supervisor; identifying the correct stud and ferrule for the task, placing the stud in the weld gun chuck and positioning the ferrule so that the correct stud is installed in accordance with manufacturer's instructions for the intended application.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6014.03 Weld studs by adjusting and verifying the welding process parameters including choosing the equipment configuration that meets the requirements for the size of stud specified; choosing machine setting and ferrule size; testing the settings and adjusting the operation of the equipment so that the correct installation is achieved and meets the requirements of the applicable welding standards.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6014.04 Remove ferrules from welded studs and checks welds for desirable characteristics by visually inspecting and interpreting the appearance of the weld and testing in accordance with the drawings, applicable codes and manufacturer's specifications using either a bend test, torque test or tension test.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6014.05 Repair a failed weld by adding fillet weld using an appropriate process or removing the unacceptable stud and repairing any pockets in the parent metal and making it smooth and flush as required by applicable codes and manufacturer's specifications.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6014: WELD STUDS		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6015.0 CONTROL FOR QUALITY WHILE WELDING

GENERAL PERFORMANCE OBJECTIVE

Carries out quality control, while welding by complying with quality control and other standards; ensuring ongoing weld quality and bench marking weld quality so that the weld meets the acceptance criteria of the applicable standard.

SKILLS

6015.01 Comply with company quality control standards, customer standards and code requirements by reading and following identified company quality assurance procedures and specific code requirements so that the weld meets the acceptance criteria of the applicable standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

◊ A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor

6015.02 Ensure ongoing weld quality by maintaining correct travel speed, size and contour of weld deposit, arc length or wire stick out, electrode angle (both travel and work), maintaining pre-heat and interpass temperature and monitoring weld joint cleanliness so that the weld meets the quality standards identified.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6015.03 Benchmark weld quality by examining joint configurations, tacks and weld passes for defects and inconsistencies, taking the appropriate corrective action(s) so that the weld meets the quality standards identified.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6015: CONTROL FOR QUALITY WHILE WELDING		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6016.0 CARRY OUT POST-WELD QUALITY CONTROL

GENERAL PERFORMANCE OBJECTIVE

Carry out post-weld quality control by visually inspecting welds; performing post- weld product control of weldment temperature; correcting excessive welding distortion; performing non-destructive checks and preparing weld samples and performing destructive tests so that post-weld inspection and tests are carried out in accordance with the weld inspection requirements of the applicable fabrication standards.

SKILLS

6016.01 Visually inspect welds by identifying common welding discontinuities such as cracks, inadequate penetration, incomplete fusion, porosity, unfilled craters, slag inclusions, incorrect weld size, undercut, arc strikes and distortion and detecting them using appropriate inspection tools and methods so that discontinuities are detected without error in accordance with the weld inspection requirements of the applicable fabrication standards such as CSA, ASME or equivalent recognized workmanship standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

◊ A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor

6016.02 Perform post-weld product control of weldment temperature by use of temperature indicating devices in accordance with the applicable weld procedure or manufacturer's guidelines.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6016.03 Correct excessive welding distortion by use of the correct combination of thermal or mechanical methods to restore the weldment to meet design requirements.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6016.04 Perform any non-destructive check such as magnetic particle, dye-penetrant, radiography or ultrasonic to identify weld discontinuities in accordance with industry standards.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6016.05 Prepare weld samples and perform destructive tests such as fracture test and welder performance bend test to verify that the sample meets the acceptance criteria of the applicable standard.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6016: CARRY OUT POST-WELD QUALITY CONTROL		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

6017.0 DEMONSTRATE SAFE WORKING PRACTICES AND PROCEDURES

GENERAL PERFORMANCE OBJECTIVE

Demonstrate safe working practices and procedures by identifying and taking corrective action against potential workplace health and safety hazards; handling, storing and disposing of hazardous workplace materials; complying with workplace legislation relating to health and safety; wearing and maintaining personal protective equipment and practicing good housekeeping in the workplace in accordance with relevant legislation, manufacturer's recommendations and company policies.

SKILLS

6017.01 Identify and take corrective action against potential workplace health and safety hazards including: noxious fumes and dust, high intensity light, fires, elevated work sites, suspended loads, poor lighting, extreme temperatures, inadequate ventilation, confined spaces, untidy work sites and uncontrolled power sources so that the potential for personal injury and damage to equipment and the environment are minimized in accordance with applicable manufacturer's instructions, government regulations and company policies.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

◊ A Trainer may be a Supervisor or the competent employee designated by the Apprentice's Sponsor

6017.02 Handle, store and dispose of hazardous workplace materials including lead, gases, acids and solvents so that individuals are protected from injury, the environment from contamination and safety practices are followed in accordance with WHMIS, OHSA, manufacturer's instructions and company procedures and policies.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6017.03 Comply with workplace legislation relating to health and safety including the Workplace Hazardous Materials Information Systems (WHMIS) guidelines and the Occupational Health and Safety Act.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6017.04 Wear and maintain personal protective equipment including eye, ear, hand, respiratory, body and foot protection, ensuring that correct fit and optimum protection is provided to the wearer for the specific task performed in accordance with applicable government regulations, manufacturer's specifications and company policy.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

6017.05 Practice good housekeeping in the workplace by ensuring that the workplace is clean, organized and free of obstructions, spills or fire hazards; that materials and equipment are cleaned and stored in designated areas after use and that protective barriers, UV shields and guards are erected so that accident or injury potential is minimized.

(mm/dd/yy)	Trainer Print Name	◊Trainer Signature
(mm/dd/yy)	Apprentice Signature	Apprentice's College of Trades ID

SPONSOR CONFIRMATION FOR U6017: DEMONSTRATE SAFE WORKING PRACTICES AND PROCEDURES		
Date Completed (mm/dd/yy)	**Sponsor Name (Print)**	**Sponsor Signature**

DEFINITIONS

Apprentices Class
Individuals in this class:

- Hold one or more valid Registered Training Agreements with the Ministry of Training, Colleges and Universities in either compulsory or voluntary trades;
- Hold a valid statement of membership with the Ontario College of Trades in the Apprenticeship class;
- Are subject to any ratios or wage rates that have been set out in regulation for their trade(s);
- Can remain in this class until they receive their Certificate of Apprenticeship;
- Can hold themselves out as Apprentices.

Certificate of Apprenticeship (C of A)
A certificate issued by the Minister of Training, Colleges and Universities to individuals who have demonstrated that they have completed an apprenticeship program in Ontario.

Certificate of Qualification (C of Q)
A certificate issued by the Registrar on behalf of the College of Trades to a Journeyperson. A Certificate of Qualification will serve as proof of having met any testing/program requirements and membership in the College's Journeypersons Class.

Competence
The ability of an individual to perform a skill repeatedly and without assistance in the workplace as set out in the Log Book.

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.

Competent Person
A competent person is defined by the *Occupational Health and Safety Act* as being a person who:

- Is qualified because of their knowledge, training and experience to organize the work and its performance;
- Is familiar with the *Occupational Health and Safety Act* and its regulations that apply to the work; and has knowledge of any potential or actual danger to health or safety in the workplace.

Competent Worker
A competent worker is defined by the *Occupational Health and Safety Act* as being a person who:

- Is qualified because of knowledge, training and experience to perform the work;
- Is familiar with the *Occupational Health and Safety Act* and with the provisions of the regulations that apply to the work; and
- Has knowledge of all potential or actual danger to health or safety in the work.

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 established by the College of Trades.

Sponsor of Record
Refers to the Sponsor documented as being signatory to the current training agreement or contract. In order for a Sponsor to be considered for the training of Apprentices, they must identify that the workplace has qualified Journeypersons 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.

Incompetence
According to the *Ontario College of Trades and Apprenticeship Act, 2009*, a member of the College of Trades may be found to be incompetent by the College Of Trades Discipline Committee if the Committee feels that the member has displayed a lack of knowledge, skill or disregard for another person's welfare while practising their trade. If this happens, the individual may be found unfit to practise their trade and their Statement of Membership/Certificate of Qualification may be revoked, suspended, or be subject to terms, conditions or limitations.

Journeyperson
Compulsory Trades Journeyperson:

- Someone who holds a valid Certificate of Qualification in the trade and who is a member in good standing of the College of Trades Journeypersons Class for the same trade; or
- Someone who holds a valid Provisional Certificate of Qualification in the trade and who is a member in good standing of the College of Trades Journeypersons Class for the same trade.

Voluntary Trades Journeyperson:

- Someone who holds a valid Certificate of Qualification in the trade and who is a member in good standing of the College of Trades Journeypersons Class for the same trade; or
- Someone who holds a Certificate of Qualification in the trade that was issued by the Ministry of Training, Colleges and Universities prior to April 8, 2013 (membership in the College of Trades is not required in this scenario).

Journeyperson Candidates Class
An individual who has completed an Ontario apprenticeship program (Certificate of Apprenticeship) in a voluntary or compulsory trade that has a Certificate of Qualification examination, but has not passed the Certificate of Qualification examination for their trade. There is a maximum time limit of one year to remain in the Journeyperson Candidates Class. Individuals in this class:

- are subject to any ratios and/or wage rates that have been set out for their trade(s), if they practise a compulsory trade.

- Can continue to work legally in their trade if they are in a compulsory trade, as they prepare to write their examination (individuals in voluntary trades do not have to be members of the College of Trades to work legally); and can hold themselves out as Journeyperson Candidates (they are neither Apprentices nor Journeypersons).

- Can remain in this class for a maximum of one year or until they pass the Certificate of Qualification exam and become members of the Journeypersons class. However, they can only remain in this class for a maximum of one year. After one year they can move into the Tradespersons Class if they are in a voluntary trade. If they are in a compulsory trade and have been in the Journeyperson Candidates Class for one year, they can no longer work legally in that trade until they pass the Certificate of Qualification examination.

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.

OCTAA
Ontario College of Trades and Apprenticeship Act, 2009

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.

Ratios
For up to date information regarding Journeyperson to Apprentice ratios, please visit: collegeoftrades.ca

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 successfully completing 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 skill described in the Log Book (note: does not mean the larger skill groups referred to in the Log Book as Skill Sets, Training Units, or General Performance Objectives, but the individual skills that make up those groups).

Skill Sets
Group of individual skills found in the Log Book (may also be called Training Unit or General Performance Objective).

Skill Set Completion for Sponsors
Listing for all skill sets and includes space for sign off by Sponsor of record.

Supervisor
An individual who oversees the performance of a task and oversees the actions or work of others.

Trade Board
Under the *Ontario College of Trades and Apprenticeship Act, 2009*, the College of Trades Appointments Council (COTAC) may appoint a Trade Board for each designated trade, composed of Employee and Employer representatives from the industry. Trade Boards are responsible for advising and making recommendations to the College of Trades Divisional Boards on issues relating to their trade. When there is no appointed trade board for a trade, the respective sector Divisional Board will act as the default Trade Board for the trade.

Tradespersons Class
A Class of Membership for individuals who practise in a voluntary trade which may or may not have a Certificate of Qualification examination.

Individuals in this class:
Have been members of the Journeyperson Candidates Class or are not eligible for Journeyperson Candidates Class and have been assessed to have experience and/or qualifications that are equivalent to a Certificate of Apprenticeship in that trade

- Are preparing to write/have no plans to write/have not passed the available Certificate of Qualification exam for their trade(s);
- Can remain in this class indefinitely or until they pass the available Certificate of Qualification exam for their trade(s); and
- Can hold themselves out as tradespersons (they are neither apprentices nor journeypersons).

Note: Individuals in the Tradespersons Class are considered Journeypersons for the purpose of determining ratios for that trade.

Trainer
A qualified Trainer in a compulsory trade is a Journeyperson with a Certificate of Qualification. In a voluntary trade, a Trainer is an individual who is considered equivalent to a Journeyperson with a Certificate of Qualification.

In this trade a trainer must be competent in the skill, but it is not mandatory to be a member of the College of Trades or have a Certificate of Qualification (CofQ).

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 join the Journeypersons class of members at the Ontario College of Trades 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

You will write an Ontario-only examination when your trade is not designated as Red Seal trade in Ontario.

Ontario's Exam Preparation Guide
collegeoftrades.ca

Basic Examination Details for You to Know
You will have **up to four hours to write your examination.** If you need more time, you must ask for it when you schedule the examination, not on the day of your examination. You can leave the examination centre if you complete the examination in less than four hours.
You need a mark of 70% to pass.

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.

Scheduling Your Examination
The examination scheduling process is currently outlined in detail on the College of Trades website: collegeoftrades.ca

Remember these 3 basic steps:

1. Confirm your eligibility to write the examination with the College of Trades.
2. Contact Client Services at the College of Trades to pay your examination fee.
3. Contact the local Ministry apprenticeship office to schedule your examination in their examination centre: http://services.findhelp.ca/eo/tcu/appoff

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 Ministry of Training, Colleges and Universities Apprenticeship Office immediately to update your sponsor record.

3. Please make sure you do record all of 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	
Registered Training Agreement #	
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 (e.g. UXXXX)	

As the Sponsor, I hereby confirm that the above information is true and accurate to the best of my knowledge.

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.

If you need additional copies of the Sponsor Record, please photocopy as needed or visit collegeoftrades.ca and search Sponsor Record Form.

CHANGE OF SPONSOR RECORD #2

SPONSOR INFORMATION	
Apprentice Name	
Registered Training Agreement #	
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 (e.g. UXXXX)	

As the Sponsor, I hereby confirm that the above information is true and accurate to the best of my knowledge.

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.

If you need additional copies of the Sponsor Record, please photocopy as needed or visit collegeoftrades.ca and search Sponsor Record Form.

CHANGE OF SPONSOR RECORD #3

SPONSOR INFORMATION	
Apprentice Name	
Registered Training Agreement #	
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 (e.g. UXXXX)	

As the Sponsor, I hereby confirm that the above information is true and accurate to the best of my knowledge.

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.

If you need additional copies of the Sponsor Record, please photocopy as needed or visit collegeoftrades.ca and search Sponsor Record Form.

INSTRUCTIONS FOR APPRENTICESHIP PROGRAM COMPLETION (Appendix A)

Once an Apprentice has completed all the classroom training and on-the-job hours specified for the trade, and has acquired all the mandatory skills included in this Log Book:

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

2. They sign the forms and submit them to their local Ministry of Training, Colleges and Universities apprenticeship office. To find the closest office, check the contact information at *http://services.findhelp.ca/eo/tcu/appoff or call the Employment Ontario toll free number at (1-800-387-5656).*

3. Since this trade is competency based, all mandatory skills in the Log Book must be signed off. If the Sponsor is completing the Apprentice before the industry recommended training hours are done, Ministry 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 Ministry of Training, Colleges and Universities apprenticeship office by mail, fax, or email (as a scanned document), they should not include their Log Book; if they are presenting this form in person at the local apprenticeship office, they should bring their Log Book with them.

After Ministry 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 Ministry will issue a Certificate of Apprenticeship to the Apprentice.

The Ontario College of Trades will receive notification of this completion, and complete the individual's membership in the Apprentices class for the trade. If the Apprentice has completed a program in a compulsory trade, the College of Trades will automatically register the Apprentice as a member of the Journeyperson Candidates class so the Apprentice can continue to work legally for one year while preparing for the certification examination. If an apprentice completes their apprenticeship in a voluntary trade **and** there is no Certificate of Qualification exam, they can apply for membership in the Journeypersons Class at the Ontario College of Trades. If there is a Certificate of Qualification exam, they must write and pass the exam in order to enter the Journeypersons Class at the Ontario College of Trades.

For permission to schedule an exam once completion is confirmed by the Ministry, the individual must first contact the College of Trades Client Services Department at 647-847-3000 or toll free at 1-855-299-0028 to pay the certification examination fee.

APPRENTICE COMPLETION FORM (Appendix B)

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 Ministry of Training, Colleges and Universities apprenticeship office (find contact information at http://services.findhelp.ca/eo/tcu/appoff 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	

PROGRAM INFORMATION			
Trade Name			
Number of hours required as per Training Agreement *(for hours-based trades only)*			
Hours completed? *(documentation attached)*	Yes ( )	No ( )	Not applicable ( )
Classroom training completed or exempt?	Yes ( )	No ( )	Not applicable ( )

I hereby confirm that the information submitted on both sides of this form is true and accurate.

X _____ Apprentice's Signature Date

X _____ Signature of Sponsor's Signing Authority Date

SKILL SET COMPLETION FOR SPONSORS (Appendix C)

You will find the skill set numbers and titles in the Log Book'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.* *Indicates the 6 processes of which 3 must be signed off (6007.0 – 6012.0). Optional performances are shaded*

SKILL SET #	SKILL SET TITLE	SIGNING AUTHORITY SIGNATURE
6000.0	USE AND MAINTAIN TOOLS AND EQUIPMENT	
6001.0	USE AND MAINTAIN MATERIAL HANDLING AND SAFETY EQUIPMENT	
6002.0	MAINTAIN WELDING EQUIPMENT AND SUPPLIES	
6003.0	PREPARE WORK SITE	
6004.0	LAY OUT, CUT AND FORM METALS TO SPECIFICATION	
6005.0	FIT SUB-ASSEMBLIES AND ASSEMBLIES	
6006.0	PREPARE ASSEMBLY FOR WELDING	
*6007.0	*WELD WITH THE SHIELDED METAL ARC WELDING (SMAW) PROCESS	
*6008.0	*WELD WITH THE GAS METAL ARC WELDING (GMAW) PROCESS	
*6009.0	*WELD WITH THE GAS TUNGSTEN ARC WELDING (GTAW) PROCESS	
*6010.0	*WELD WITH THE FLUX CORED OR METAL CORED ARC WELDING (FCAW OR MCAW) PROCESS	
*6011.0	*WELD WITH THE SUBMERGED ARC WELDING (SAW) PROCESS	
*6012.0	*WELD WITH THE PLASMA ARC WELDING (PAW) PROCESS	
6013.0	BRAZE METAL	
6014.0	WELD STUDS	
6015.0	CONTROL FOR QUALITY WHILE WELDING	
6016.0	CARRY OUT POST-WELD QUALITY CONTROL	
6017.0	DEMONSTRATE SAFE WORKING PRACTICES AND PROCEDURES	

MINISTRY OF TRAINING, COLLEGES AND UNIVERSITIES 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 _____ Date _____

MINISTRY OF TRAINING, COLLEGES AND UNIVERSITIES
APPRENTICESHIP OFFICES IN ONTARIO (Appendix D)

Location	Contact	Location	Contact
Barrie 705-737-1431	55 Cedar Pointe Dr Unit 609, Barrie, ON L4N 5R7	**North Bay** 705-495-8515	200 First Ave West, North Bay, ON P1B 3B9
Belleville 613-968-5558	135 North Front St, Belleville, ON K8P 3B5	**Ottawa** 613-731-7100	Preston Square, 347 Preston St 3rd Flr, Ottawa, ON K1S 3H8
Brantford 519-756-5197	505 Park Rd North Suite 201, Brantford, ON N3R 7K8	**Owen Sound** 519-376-5790	1450 1st Ave West Suite 100, Owen Sound, ON N4K 6W2
Chatham 519-354-2766	870 Richmond St West 1st Floor, Chatham, ON N7M 5J5	**Pembroke** 613-735-3911	615 Pembroke St East, Pembroke, ON K8A 3L7
Cornwall 613-938-9702	132 Second St East Ste 202, Cornwall, ON K6H 1Y4	**Peterborough** 705-745-1918	901 Lansdowne St West, Peterborough, ON K9J 1Z5
Dryden 807-223-4632	Provincial Government Building, 479 Government St, Dryden, ON P8N 3K9	**Pickering (City of)** 905-837-7721	1420 Bayly St Unit 1, Pickering, ON L1W 3R4
Elliot Lake 705-848-4661	50 Hillside Dr North, Elliot Lake, ON P5A 1X4	**Sarnia** 519-542-7705	Bayside Mall, 150 Christina St North, Sarnia, ON N7T 7W5
Fort Frances 807-274-8634	922 Scott St 2nd Flr, Fort Frances, ON P9A 1J4	**Sault Ste. Marie** 705-945-6815	477 Queen St East 4th Flr, Sault Ste Marie, ON P6A 1Z5
Hamilton Central 905-521-7764	Ellen Fairclough Bldg, 119 King St West 8th Flr, Hamilton, ON L8P 4Y7	**St Catharines** 905-704-2991	Garden City Tower, 301 St Paul St 10th Flr, St Catharines, ON L2R 7R4
Kapuskasing 705-337-4381	Ontario Government Complex, 122 Government Rd West, Kapuskasing, ON P5N 2X8	**Sudbury** 705-564-3030	159 Cedar St Ste 506, Sudbury, ON P3E 6A5
Kenora 807-468-2879	227 1/2 Second St South, Kenora, ON P9N 1G4	**Thunder Bay** 807-346-1550	189 Red River Rd Suite 103, Thunder Bay, ON P7B 1A2
Kingston 613-548-1151	Cornell Corporate Centre, 299 Concession St Ste 201, Kingston, ON K7K 2B9	**Timmins** 705-235-1950	Ontario Government Complex, 5520 Highway 101 East Wing B, South Porcupine, ON P0N 1H0
Kitchener 519- 653-5758	4275 King St East Ste 200, Kitchener, ON N2P 2E9	**Toronto Central** 416-326-5800	625 Church St 1st Fl, Toronto, ON M7A 2B5
London 519-675-7788	1200 Commissioners Rd E Unit 72, London, ON N5Z 4R3	**Windsor Central** 519-973-1441	Roundhouse Centre, 3155 Howard Ave 2nd Fl, Ste 200, Windsor, ON N8X 4Y8
Mississauga (City of) 905-279-7333	The Emerald Centre, 10 Kingsbridge Garden Cir Ste 404, Mississauga, ON L5R 3K6		

For current office listings, please visit: *http://services.findhelp.ca/eo/tcu/appoff*

Completing Your Apprenticeship Program

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

- Check the Ontario College of Trades Public Register to make sure your Apprentices class membership is still active: https://tmsportal.collegeoftrades.ca/web/ocot-public-services-v3/public-registry
- Follow the completion instructions on the Completion Form (Appendix A) in the Log Book.
- Answer any questions that MTCU staff may have, and provide any additional completion documentation they may require.
- Once they confirm completion, MTCU will issue you a Certificate of Apprenticeship and notify the Ontario College of Trades of your completion.

After Your Apprenticeship

If you are in a trade with a certification exam, the College of Trades will **automatically** complete your membership in the Apprentices class and activate your 12-month membership in the Journeyperson Candidates class. This change will be reflected on your account with the College as well as on the College's Public Register.

Membership in the Journeyperson Candidates class will allow you to continue practising in a compulsory trade for 12 months while you prepare for and write your exam; if you are in a voluntary trade, it is your automatic approval to challenge the certification exam.

The College will send you a Journeyperson Candidates class welcome letter within 3 weeks of completion that outlines any/all of your future requirements for membership and examination as appropriate (different situations for voluntary and compulsory trades).

If you complete an apprenticeship program for which there is no exam, you can submit an application to become a member of the College's Journeypersons class on the basis of having earned a Certificate of Apprenticeship in the trade.

Preparing For Your Exam

Find out if your trade has a Certificate of Qualification exam at:
www.collegeoftrades.ca/wp-content/uploads/tradesOntarioTradesCodes_En.pdf

For permission to schedule an exam once completion is confirmed by MTCU, you must first contact the College's Client Services Department at 647-847-3000 or toll free at 1-855-299-0028 to pay the certification exam fee. Once you have paid, contact your local MTCU Apprenticeship office to book your exam.

Download Ontario College of Trades exam preparation guide at:
www.collegeoftrades.ca/resources/exam-process **and/or view the exam preparation guide for Red Seal trades at:** www.red-seal.ca/w.2lc.4m.2@-eng.jsp

ONTARIO COLLEGE OF TRADES

ORDRE DES MÉTIERS DE L'ONTARIO

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