



ONTARIO COLLEGE OF TRADES

ORDRE DES MÉTIERS DE L'ONTARIO

Apprenticeship
Training Standard

Construction Boilermaker

Trade Code: 428A

Development Date: May 2004

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APPRENTICESHIP PROGRAM SUMMARY/GUIDELINES

1. **Program Definition: Construction Boilermaker** is defined as a person who:

- fabricates, assembles, installs, constructs, erects, alters, maintains, repairs, disassembles, tests, and demolishes boilers, process equipment, tanks, pressure vessels, heat exchangers, calandria, pollution control systems, furnaces, water towers, penstocks, scroll casing, exhaust stacks, and vats and related ducting, parts, and access assemblies.

CONSTRUCTION BOILERMAKER is an approved apprenticeship program described under O. Reg. 1047 of the *Trades Qualification and Apprenticeship Act, 1998* (TQAA).

2. **Regulatory Guidelines**

- **On-the-Job Training Duration (for apprentices)**
O. Reg. 1047 identifies four periods of **1650** hours of on the job experience as the duration necessary for an apprentice to become competent in the skills required.
- **In-School Training Duration**
O. Reg. 1047 identifies **720** hours of in-school training as the duration necessary for an apprentice to complete the in-school curriculum for this program, except where an apprentice has been exempted from any level of that curriculum.
- **Ratio**
O. Reg. 1047 identifies a journeyman-to-apprentice ratio of one journeyman to one apprentice for the first apprentice and three additional journeymen for each additional apprentice as the ratio generally necessary for an apprentice to be properly trained on the job in this program.
- **Rate of Wages**
O. Reg. 1047 identifies that the rate of wages for the apprentice will be not less than 60% of the wage of a journeyman working for the employer for the first period, not less than 70% of the journeyman's wage for the second period, not less than 80% of the journeyman's wage for the third period, and not less than 90% of the journeyman's wage for the fourth period.

3. **Program Requirements**

- **Not a Compulsory Trade**
This program is not a compulsory trade as per Ontario Regulation 1047 Subsection 10(2). Therefore, an individual is not required to be a registered apprentice or possess certification to perform the skills contained in the program.
- **Academic Standard**
The Trade Regulation (O. Reg. 1047) has identified the minimum academic standard for entry to this program as completion of Grade 10.
- **Eligibility for Exam Challenge (*for Non-apprentice C of Q Applicants*)**
The challenger must:
 - provide Training Standard or Schedule of Training sign off;
 - demonstrate that he or she has acquired **6600** hours of on-the-job training.
- **Eligibility for Program Completion (*for Apprentices*)**
The apprentice must:
 - complete **5880** hours of experience in the skills identified in the Training Standard or Schedule of Training;
 - complete the in-school training as outlined in the industry and ministry-approved Curriculum Standard.
- **Other Resources**
Complete program requirements, policies, and standards can be obtained by referring to the following resources:
 - *Trades Qualification and Apprenticeship Act, 1998* (TQAA)
 - TQAA General Regulation 1055
 - TQAA **Construction Boilermaker** Regulation 1047
 - Program-specific Apprenticeship Training Standards or Schedules of Training
- **Other Required Certification**
N/A
- **Academic Background**
Industry has identified relevant secondary-school course(s) likely to increase an individual's chances of success if completed before program entry. For details, see the document Apprenticeship Subject Pathways.

CONSTRUCTION BOILERMAKER

COMPETENCY ANALYSIS PROFILE Construction Boilermaker – 428A

(All unshaded skill sets must be demonstrated/completed.)

SKILL SETS

SKILLS

USE AND MAINTAIN TOOLS AND EQUIPMENT 6000.0	Use and maintain metal-working and trade-specific hand tools and associated equipment 6000.01	Confirm metal shapes 6000.02	Use and maintain electrical, pneumatic, hydraulic and explosive actuated power tools 6000.03	Use and maintain measuring devices and layout equipment 6000.4	
USE AND MAINTAIN SCAFFOLDING, WORK PLATFORMS, AND FALL-ARREST EQUIPMENT 6001.0	Select, inspect, and erect scaffolding 6001.01	Select, inspect, and operate work platforms, swing, stages, and boatswain's chairs 6001.02	Work on scaffolding and work platforms and at heights 6001.03	Dismantle scaffolds 6001.04	
MAINTAIN CUTTING, PREHEAT, AND WELDING EQUIPMENT AND SUPPLIES 6002.0	Maintain oxyfuel cutting and heating equipment 6002.01	Maintain arc welding equipment 6002.02	Store welding consumables 6002.03		
PREPARE FOR INSTALLATION 6003.0	Prepare for job layout 6003.01	Develop an installation plan 6003.02	Survey site 6003.03	Select tools, materials, and equipment required for the installation 6003.04	Determine work sequence and required workforce 6003.05
SET UP JOB SITE 6004.0	Locate and set up equipment 6004.01	Block out job site 6004.02	Consult with supervisors 6004.03		

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CUT AND GOUGE METALS	Cut metal with oxyfuel equipment	Cut and gouge metal with arc air-gouging equipment	Cut metal with plasma arc equipment	Cut metal and concrete with high-pressure water and oxygen cutting lances	
6005.0	6005.01	6005.02	6005.03	6005.04	

WELD ASSEMBLIES	Select and set up welding equipment	Install consumables	Adjust and verify welding process parameters	Preheat components or assembly	Fillet weld using the SMAW, GMAW, and GTAW processes
6006.0	6006.01	6006.02	6006.03	6006.04	6006.05
	Groove weld using the SMAW and GMAW processes	Weld using orbital and overlay welding techniques	Weld using the stud welding process	Weld using the plastic welding process	Clean welds
	6006.06	6006.07	6006.08	6006.09	6006.10
	Measure welds for completeness	Visually inspect welds	Perform post-weld product control of weldment temperature	Correct excessive welding distortion	
	6006.11	6006.12	6006.13	6006.14	

FIT PLATE SUBASSEMBLIES AND ASSEMBLIES	Fabricate or modify plate-fitting devices	Prepare welding joints	Fit components	Preheat components or assembly	Plan for the control of distortion
6007.0	6007.01	6007.02	6007.03	6007.04	6007.05
	Perform tack welding				
	6007.06				

CONSTRUCTION BOILERMAKER

FIT TUBES AND TUBE ASSEMBLIES 6008.0	Prepare tubes and tube sheets for installation	Fabricate or modify tube-fitting devices	Prepare welding joints	Fit components	Expand tubes
	6008.01	6008.02	6008.03	6008.04	6008.05
	Preheat components or assemblies	Control distortion	Perform tack welding		
	6008.06	6008.07	6008.08		
RIG AND HOIST 6009.0	Select and inspect rigging equipment	Position and employ rigging	Select and inspect hoisting and lifting equipment	Operate hoisting equipment	
	6009.01	6009.02	6009.03	6009.04	
CONSTRUCT AND ERECT PLANT COMPONENTS AND RELATED EQUIPMENT 6010.0	Construct plant subcomponents and related equipment on site	Erect plant components and related equipment on site			
	6010.01	6010.02			
REMOVE OR DEMOLISH PLANT COMPONENTS AND RELATED EQUIPMENT 6011.0	Dismantle or demolish plant components and related equipment	Remove dismantled or demolished materials and equipment			
	6011.01	6011.02			
MAINTAIN PLANT SYSTEMS AND ANCILLARY STRUCTURES 6012.0	Accommodate the local maintenance environment	Determine the scope of work	Repair plant systems and ancillary equipment	Replace plant systems and ancillary equipment	
	6012.01	6012.02	6012.03	6012.04	

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DEMONSTRATE SAFE WORKING PRACTICES AND PROCEDURES	Identify and take corrective action against potential workplace health and safety hazards	Handle, store, and dispose of hazardous workplace materials	Comply with workplace legislation relating to health and safety	Wear and maintain personal protective equipment	Practise good housekeeping in the workplace
6013.0	6013.01	6013.02	6013.03	6013.04	6013.05

PREFACE

This Training Standard was developed by the Workplace Training Branch of the Ministry of Training, Colleges, and Universities (MTCU), in partnership with the Provincial Advisory Committee and in consultation with representatives from the industry. This document is intended to be used by the apprentice, supervisor/trainer, and employer as a “blueprint” for training and certification requirements and as an acknowledgement of training completion.

This training document becomes the apprentice’s only record of workplace training performance.

The supervisor/trainer and apprentice are required to sign off on and date the skills following each successful completion, unless a skill is shaded (optional).

The care and maintenance of this training document are the joint responsibility of the apprentice and the employer. By signing off on the skill, the supervisor/trainer and the apprentice are indicating that the apprentice has demonstrated competence in the skill. This training standard has been developed specifically for documenting the apprentice’s acquisition of skills of the trade.

Please Note: Apprenticeship Training and Curriculum Standards were developed by the Ministry of Training, Colleges and Universities (MTCU). As of April 8th, 2013, the Ontario College of Trades (College) has become responsible for the development and maintenance of these standards. The College is carrying over existing standards without any changes.

However, because the Apprenticeship Training and Curriculum Standards documents were developed under either the Trades Qualification and Apprenticeship Act (TQAA) or the Apprenticeship and Certification Act, 1998 (ACA), the definitions contained in these documents may no longer be accurate and may not be reflective of the Ontario College of Trades and Apprenticeship Act, 2009 (OCTAA) as the new trades legislation in the province. The College will update these definitions in the future.

Meanwhile, please refer to the College’s website (<http://www.collegeoftrades.ca>) for the most accurate and up-to-date information about the College. For information on OCTAA and its regulations, please visit: <http://www.collegeoftrades.ca/about/legislation-and-regulations>

DEFINITIONS

ACA

Apprenticeship and Certification Act, 1998

Certificate of Apprenticeship (C of A)

Certification issued to individuals who have demonstrated that they have completed an apprenticeship in Ontario

Certificate of Qualification (C of Q)

Certification issued to C of Q applicants who have achieved a passing grade on the certification exam for their trade

Competency Analysis Profile

A document that summarizes the on-the-job training requirements of an individual trade and details the skills/skill sets that must be demonstrated

Competence

The ability of an individual to perform a skill repeatedly and without assistance in the workplace to the standard set out in the Training Standard or Schedule of Training

General Performance Objective (On-the-Job Skill Set)

Describes a set of skills that includes all performance objectives under that skill set

Industry Committee (IC) – Under the ACA and Provincial Advisory Committee (PAC) under the TQAA

Under the ACA and TQAA, the Minister may appoint a provincial committee in any trade or group of trades to advise the Minister in matters relating to the establishment and operation of apprenticeship training programs and trades qualifications

Journeyman or Equivalent

A person who has acquired the minimum knowledge and skills of a trade, occupation, or craft as attested to by a provincial or territorial authority

Mandatory

Status assigned to unshaded individual skills, skill sets, or general performance objectives that must be signed off on to demonstrate that the apprentice has completed the program

Optional

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 but that may be tested on an examination for certification

Sign-Off

Signature of the employer of record or an individual to whom that or employer has delegated signing authority, indicating an apprentice's achievement of competence

Skill

Individual skill described in the Training Standard (note: does not mean the larger skill groups referred to in the Training Standard as Skill Sets, Training Units, or General Performance Objective, but the individual skills that make up those groups)

Skill Sets

Group of individual skills found in the Training Standard (may also be called Training Unit or General Performance Objective)

Skill Set Completion Form

Lists all skill sets and includes space for sign-off by /employer of record

Employer

A person who has entered into a registered training agreement with an apprentice under which the person is required to ensure that the apprentice is provided with workplace-based training in a trade, other occupation, or skill set as part of an apprenticeship program approved by the Director

Employer of Record

The employer documented as the signatory to the current training agreement or contract. For employers to be considered for the training of apprentices, they must identify that the workplace has qualified journeypersons or equivalent on site and that the workplace has the tools, equipment, materials, and processes that have been identified by Provincial Advisory Committees (PACs) or Industry Committees (ICs) as being required for the trade

Supervisor

An individual who oversees the execution of a task or oversees the work of others

Trainer

A qualified trainer in a compulsory trade is a journeyperson with a Certificate of Qualification and in a voluntary trade is a journeyperson with a Certificate of Qualification or an individual who is considered equivalent to a journeyperson with a Certificate of Qualification

TQAA

Trades Qualification and Apprenticeship Act, 1998

Training Standard

A document that has been written in concise statements that describe specific skills, and their standard of performance, that an apprentice must perform on the job in order to be considered competent. By using the document, trainers will be able to ensure that the apprentice is developing skills detailed for the occupation

IMPORTANT DIRECTIONS

Apprentice

1. All complete skills or skill sets must be signed and dated by both the apprentice and sponsor/employer when either all terms of the contract have been completed or the apprentice leaves the employ of the employer.
2. It is the responsibility of the apprentice to inform the apprenticeship staff at the local Ministry of Training, Colleges and Universities office regarding the following changes:
 - change of sponsor/employer address
 - change of apprentice name or address
 - transfer to a new sponsor/employer.
3. The Skill Set Completion Form must be completed and signed by the current sponsor/employer and presented to the local Apprenticeship Client Services Office at the fulfillment of all terms of a Contract of Apprenticeship/Training Agreement.
4. The apprentice completion form with the Completed and Authorized Training Standard must be presented to the local Apprenticeship Client Services Unit.

Sponsors/Employers and Supervisors/Trainers

The Training Standard identifies skills required for this trade/occupation and its related training program.

This Training Standard has been written in concise statements, which describe how an apprentice must perform each skill in order to become competent. Competence means being able to perform the task to the required standard.

In using this Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing the skills detailed for the trade/occupation.

Supervisors/Trainers and apprentices are required to sign off and date the skills following each successful acquisition.

Sponsors/Employers 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.

NOTICE OF COLLECTION OF PERSONAL INFORMATION

1. At any time during your apprenticeship training, you may be required to show this training standard to the Ministry of Training, Colleges and Universities (the Ministry). You will be required to disclose the signed Apprenticeship Completion form to the Ministry in order to complete your program. The Ministry 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 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 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.

ROLES & RESPONSIBILITIES OF APPRENTICE, SPONSOR/EMPLOYER AND SUPERVISOR/TRAINER

Apprentice “Apprenticeship is a learning exercise”

- Practice safe work habits.
- Use your apprenticeship training standard as a journal to keep track of which skills you have achieved.
- Talk over your training plan with your Training Consultant, Employer, Union, or Sponsor.
- Know what tools are required for your trade and how to use them.
- Ask questions and keep asking.
- Talk to your employer about your training needs.
- Demonstrate enthusiasm and good work habits.
- Ensure that you and your supervisor/trainer sign off skill/skill sets upon demonstration of competency.

Sponsor/Employer “Training is an Investment”

- Demonstrate safe work habits.
- Attest to successful achievement by signing the skill/skills sets.
- Provide opportunities and time for the apprentice to learn the trade.
- Offer practical trade training experiences that cover all of the skill sets.
- Foster work ethics that support training while minimizing productivity losses.
- Set out clear expectations, then recognize or reward performance excellence.
- Involve both the apprentice and supervisor/trainer in developing the training plan.
- Use the Training Standard as a monitoring tool and part of regular performance evaluations.
- Select supervisors/trainers with good communication skills and who work well with others.
- Encourage supervisors/trainers to take upgrading courses - (e.g. Train the Trainer, Mentor Coach, etc).
- Complete the Skill Set Completion Form once the apprentice has demonstrated competency in the training.
- Ensure that the apprentice always works under the direction of or has access to a qualified supervisor/trainer.
- Vary the apprentice’s exposure to all the skills set out in the training standard.

Supervisor/Trainer

- Demonstrate safe work habits.
- Treat apprentices fairly and with respect.
- Use the Training Standard as a guide to evaluating competence in each skill area. In using the Training Standard, supervisors/trainers will be able to ensure that the apprentice is developing skills detailed for the trade/occupation.
- Review the Training Standard with the apprentice and develop a training plan.
- Respond fully to all questions.
- Be patient. Explain what is to be done, then show how it is done, and then let the apprentice demonstrate the task.
- Provide continuous feedback.
- Sign off individual skills/skill sets once the apprentice demonstrates competence in the skill.

Suggestions for Assessing the Progress of the Apprentice in the Workplace

- Use informal daily observation.
- Provide constructive feedback to build confidence.
- Allow the supervisor/trainer time to teach and demonstrate the skills.
- Take prompt action wherever problems occur.
- Conduct regular performance reviews involving the apprentice, supervisor/trainer and sponsor/employer.
- Use the Training Standard as the reference for establishing the competency of the apprentice.

SKILL SET COMPLETION FORM

SKILLS SETS	TITLE	SIGNING AUTHORITY
6000.0	USE AND MAINTAIN TOOLS AND EQUIPMENT	
6001.0	USE AND MAINTAIN SCAFFOLDING, WORK PLATFORMS, AND FALL-ARREST	
6002.0	MAINTAIN CUTTING, PREHEAT, AND WELDING EQUIPMENT	
6003.0	PREPARE FOR INSTALLATION	
6004.0	SET UP JOB SITE	
6005.0	CUT AND GOUGE METALS	
6006.0	WELD ASSEMBLIES	
6007.0	FIT PLATE SUBASSEMBLIES AND ASSEMBLIES	
6008.0	FIT TUBES AND TUBE ASSEMBLIES	
6009.0	RIG AND HOIST	
6010.0	CONSTRUCT AND ERECT PLANT COMPONENTS AND RELATED EQUIPMENT	
6011.0	REMOVE OR DEMOLISH PLANT COMPONENTS AND RELATED EQUIPMENT	
6012.0	MAINTAIN PLANT SYSTEMS AND ANCILLARY STRUCTURES	
6013.0	DEMONSTRATE SAFE WORKING PRACTICES AND PROCEDURES	

NOTE ON SHADED PERFORMANCE OBJECTIVES AND SKILLS:

- Shaded performance objectives and skill sets are optional. The shaded skills do not have to be demonstrated or signed-off for completion of the on-the-job component of the apprenticeship
- The in-school curriculum learning outcomes will cover all of the skill sets, both shaded and unshaded.
- The Certificate of Qualification examination will test the whole of the trade and may test both shaded and unshaded performance skill sets.

6000.0 USE AND MAINTAIN TOOLS AND EQUIPMENT

GENERAL PERFORMANCE OBJECTIVE

Use and maintain hand tools, power tools, 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; 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.

PERFORMANCE OBJECTIVES

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, 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.

Date Completed

Apprentice

Supervisor/Trainer

6001.0 USE AND MAINTAIN SCAFFOLDING, WORK PLATFORMS, AND FALL-ARREST EQUIPMENT

GENERAL PERFORMANCE OBJECTIVE

Use and maintain scaffolding and safety equipment by selecting, inspecting, and erecting scaffolding and work platforms; working on scaffolding and at heights using fall-arrest equipment; and dismantling scaffolds and material handling equipment so that scaffolding is erected, used, dismantled, and stored properly in accordance with employer's procedures and Canadian Standards Association (CSA) safety standards or Ontario regulation requirements.

PERFORMANCE OBJECTIVES

SKILLS

6001.01 **Select, inspect, and erect scaffolding** by selecting scaffolding for the specific job; performing pre-use inspection by visually checking all the components for defects; erecting scaffolding; and ensuring that it is sufficient for the task, has no visual defects, and is placed on a firm footing in accordance with employer's procedures, manufacturers' specifications, and CSA safety standards or Ontario regulation requirements.

Date Completed

Apprentice

Supervisor/Trainer

6001.0 USE AND MAINTAIN SCAFFOLDING, WORK PLATFORMS, AND FALL-ARREST EQUIPMENT (cont.)

6001.02 Select, inspect, and operate work platforms, swing stages, and boatswain's chairs by selecting the work lift for the specific job; performing pre-use inspection by visually checking all of the components for defects; operating the work lift; and ensuring it is sufficient for the task, has no visual defects, and is placed on a secure lifting point in accordance with employer's procedures, manufacturers' specifications, and CSA safety standards or Ontario regulation requirements.

Date Completed

Apprentice

Supervisor/Trainer

6001.03 Work on scaffolding and work platforms and at heights by selecting and utilizing a fall-protection system, wearing the appropriate equipment, and following fall-protection procedures as required by employer's procedures, CSA safety standards, and Ontario regulation requirements.

Date Completed

Apprentice

Supervisor/Trainer

6001.0 USE AND MAINTAIN SCAFFOLDING, WORK PLATFORMS, AND FALL-ARREST EQUIPMENT (cont.)

6001.04 Dismantle scaffolds by disassembling scaffolding and storing it correctly and in good repair as per employer procedures and/or Ontario regulation requirements.

Date Completed

Apprentice

Supervisor/Trainer

6002.0 MAINTAIN CUTTING, PREHEAT, AND WELDING EQUIPMENT AND SUPPLIES

GENERAL PERFORMANCE OBJECTIVE

Maintain cutting, preheat, and welding equipment and supplies by maintaining oxyfuel cutting and heating equipment, maintaining arc welding equipment, and storing welding consumables so that equipment and materials are maintained at a standard of repair that is safe and functionally effective within CSA, American Society of Mechanical Engineers (ASME), manufacturers', or workplace standards.

PERFORMANCE OBJECTIVES

SKILLS

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

Date Completed

Apprentice

Supervisor/Trainer

6002.0 MAINTAIN CUTTING, PREHEAT, AND WELDING EQUIPMENT AND SUPPLIES (cont.)

6002.02 Maintain arc welding equipment by inspecting, testing, calibrating, adjusting, and replacing defective components associated with arc welding equipment, including welding cables, electrode holders, ground clamps, feeders and guns, flow meters, and 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 manufacturers' and workplace standards.

Date Completed

Apprentice

Supervisor/Trainer

6002.03 Store welding consumables by inspecting, storing, 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 manufacturers' recommendations, so that welding consumables are stored and maintained free from contamination and damage, in accordance with CSA, ASME, or an equivalent recognized quality performance standard.

Date Completed

Apprentice

Supervisor/Trainer

6003.0 PREPARE FOR INSTALLATION

GENERAL PERFORMANCE OBJECTIVE

Prepare for installation by preparing for job layout; developing an installation plan; surveying the site; selecting the required tools, materials, and equipment; and determining work sequence and required workforce so that the requirements for the installation are anticipated and planned for and the installation plan is comprehensive and practical.

PERFORMANCE OBJECTIVES

SKILLS

6003.01 Prepare for job layout by reading and interpreting installation documents, blue prints, and specifications; transferring data to an installation plan; and ensuring all required components to begin installation are on site and identified so that installation requirements are clear and layout meets practical requirements.

Date Completed

Apprentice

Supervisor/Trainer

6003.02 Develop an installation plan by identifying worksite variables; extracting site-relevant details from information sheets, drawings, and specifications; taking into account effects of concurrent operations on installation procedure; and determining worksite layout and space usage requirements so that work can proceed in a safe and orderly manner.

Date Completed

Apprentice

Supervisor/Trainer

6003.0 PREPARE FOR INSTALLATION (cont.)

6003.03 Survey site by examining site layout and establishing lines and grades, including reference points for the installation, so that relationships among the components of the installation are clear and installation is feasible.

Date Completed

Apprentice

Supervisor/Trainer

6003.04 Select tools, materials, and equipment required for the installation as determined by the installation plan so that all standard and special tools, materials, and equipment are available at the site or acquisition of them is planned, as required.

Date Completed

Apprentice

Supervisor/Trainer

6003.05 Determine work sequence and required workforce by reviewing site accessibility, order of assembly, size and weight of components, and method of assembly so that major problems are identified and work sequence is clear and manpower is available when required.

Date Completed

Apprentice

Supervisor/Trainer

6004.0 SET UP JOB SITE

GENERAL PERFORMANCE OBJECTIVE

Set up the job site by locating and setting up equipment, blocking out the job site, and consulting with supervisors so that site is safe, efficient, and practical for the planned installation.

PERFORMANCE OBJECTIVES

SKILLS

6004.01 **Locate and set up equipment**, including temporary construction facilities and equipment trailers, so that optimum placement is found for the site, equipment is properly located and oriented, and preoperational checks are conducted to ensure effective operation.

Date Completed

Apprentice

Supervisor/Trainer

6004.02 **Block out job site** by identifying site-relevant safety concerns, removing or avoiding hazards, and occupying available laydown area and space so that interference from competing work activities is reduced, movement in the workspace is safe and efficient, and sequence of operations is effective and non-productive activities are minimized.

Date Completed

Apprentice

Supervisor/Trainer

6004.0 SET UP JOB SITE (cont.)

6004.03 Consult with supervisors and other workers to ensure that the equipment and the job site meet the installation or removal requirements and that hazardous material protection, collection, and disposal systems are in place and workable.

Date Completed

Apprentice

Supervisor/Trainer

6005.0 CUT AND GOUGE METALS

GENERAL PERFORMANCE OBJECTIVE

Cut and gouge metals using oxyfuel, air carbon arc, and plasma arc equipment so that all equipment is set up, used, and maintained in accordance with manufacturers' instructions for the intended application and that the cut or gouge is made to specification.

PERFORMANCE OBJECTIVES

SKILLS

6005.01 Cut metal with oxyfuel equipment by selecting and assembling regulators, torches, fuel gases, tips, required pressures, personal equipment, and tools; activating the equipment; making the required cut; and shutting down the equipment so that equipment is set up and used in accordance with manufacturers' instructions for the intended application and the cut is made to specification.

Date Completed

Apprentice

Supervisor/Trainer

6005.02 Cut and gouge metal with arc air-gouging equipment by selecting and assembling power source, electrodes, pressurized air, personal equipment, and tools; activating the equipment; making the required cut; and shutting down the equipment so that equipment is set up and used in accordance with manufacturers' instructions for the intended application and the cut is made to specification.

Date Completed

Apprentice

Supervisor/Trainer

6005.0 CUT AND GOUGE METALS (cont.)

6005.03 Cut metal with plasma arc equipment by selecting orifice size, gas, gas pressure, and heat settings based on thickness of metal, personal equipment, and tools; activating the equipment; making the required cut; and shutting down the equipment so that equipment is set up and used in accordance with manufacturers' instructions for the intended application and the cut is made to specification.

Date Completed

Apprentice

Supervisor/Trainer

6005.04 Cut metal and concrete with high-pressure water and oxygen cutting lances by selecting power source, pressurized air, and tools; assembling personal equipment; activating the equipment; making the required cut; and shutting down the equipment so that equipment is set up and used in accordance with manufacturers' instructions for the intended application and the cut is made to specification.

Date Completed

Apprentice

Supervisor/Trainer

6006.0 WELD ASSEMBLIES

GENERAL PERFORMANCE OBJECTIVE

Weld assemblies by selecting and setting up welding equipment, installing consumables, adjusting and verifying welding parameters, preheating components, welding using appropriate processes, cleaning and measuring welds, visually inspecting welds, and performing post-weld product control of the weldment, including correcting excessive welding distortion, so that the weld meets the weld-inspection requirements of the applicable fabrication standards, such as CSA, ASME, or equivalent recognized quality performance standard.

PERFORMANCE OBJECTIVES

SKILLS

6006.01 **Select and set up welding equipment** by choosing power source, welding cable assemblies, welding electrode holder, any electrode or wire, any associated shielding system, associated materials and equipment, and personal equipment and tools, and then assembling them so that all the equipment necessary to weld using such processes as shielded metal arc welding (SMAW), gas metal arc welding (GMAW), gas tungsten arc welding (GTAW), stud welding, plastic welding, and orbital or overlay welding is available and is correctly set up in accordance with manufacturers' instructions for the intended application.

Date Completed

Apprentice

Supervisor/Trainer

6006.0 WELD ASSEMBLIES (cont.)

6006.02 Install consumables by extracting requirements from the applicable welding procedure or following the directions of a supervisor; identifying the type and size of any filler metal for the welding position and joint type, and the composition and thickness of the base material; mounting any filler metals; and installing any required shielding gas or purging equipment and any other consumables so that the correct materials are installed in accordance with manufacturers' instructions for the intended application.

Date Completed

Apprentice

Supervisor/Trainer

6006.03 Adjust and verify welding process parameters by choosing the equipment configuration that meets the specified requirements for size and quality of the weld; 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 quality performance standard.

Date Completed

Apprentice

Supervisor/Trainer

6006.0 WELD ASSEMBLIES (cont.)

6006.04 Preheat 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 maintaining interpass temperatures without causing distortion or excessive residual stresses.

Date Completed Apprentice Supervisor/Trainer

6006.05 Fillet weld using the SMAW, GMAW, and GTAW processes on lap, corner, and tee joints; and in the flat, horizontal, vertical, and overhead (except for GMAW) 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 quality performance standard.

Date Completed Apprentice Supervisor/Trainer

6006.0 WELD ASSEMBLIES (cont.)

6006.06 Groove weld using the SMAW and GMAW processes on either flare and single-bevel joints or square and single-vee joints; and in the flat, horizontal, vertical, and overhead (except for GMAW) 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 quality performance standard. **Note:** Joints without solid backing may be substituted for joints with solid backing.

Date Completed

Apprentice

Supervisor/Trainer

6006.07 Weld using orbital and overlay welding techniques 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 quality performance standard.

Date Completed

Apprentice

Supervisor/Trainer

6006.0 WELD ASSEMBLIES (cont.)

6006.08 Weld using the stud welding process by choosing the equipment configuration that meets the requirements for the size of stud specified; choosing machine setting and ferrule size; testing the setting; adjusting the operation of the equipment; removing ferrules from work; inspecting and testing welds; and repairing failed welds so that the process operations are correctly performed in accordance with the weld procedure, the equipment used, the stud manufacturer's recommendations, and the requirement of the applicable standard.

Date Completed

Apprentice

Supervisor/Trainer

6006.09 Weld using the plastic welding process with thermoplastic material in the work environment identified by the employer so that the weld meets a recognized quality performance standard.

Date Completed

Apprentice

Supervisor/Trainer

6006.0 WELD ASSEMBLIES (cont.)

6006.10 Clean welds using a wire brush, descaler, grinder, or other appropriate abrasive process so that welds are free of slag and scale surface irregularities and meet the weld-inspection requirements of the applicable fabrication standards, such as CSA, ASME, or equivalent recognized quality performance standard.

Date Completed

Apprentice

Supervisor/Trainer

6006.11 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 quality performance standard.

Date Completed

Apprentice

Supervisor/Trainer

6006.0 WELD ASSEMBLIES (cont.)

6006.12 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 quality performance standard.

Date Completed

Apprentice

Supervisor/Trainer

6006.13 Perform post-weld product control of weldment temperature by using temperature-indicating devices in accordance with the applicable weld procedure or manufacturers' guidelines.

Date Completed

Apprentice

Supervisor/Trainer

6006.14 Correct excessive welding distortion by using a combination of thermal stress relief or mechanical methods to restore the weldment to meet design requirements.

Date Completed

Apprentice

Supervisor/Trainer

6007.0 FIT PLATE SUBASSEMBLIES AND ASSEMBLIES

GENERAL PERFORMANCE OBJECTIVE

Fit plate subassemblies and assemblies by fabricating or modifying plate-fitting devices, preparing welding joints, fitting components, preheating components or assemblies, planning for control of distortion, and performing tack welding so that measurements are within tolerances allowed, assemblies are dimensionally stable, and fitting/tacking facilitates welding.

PERFORMANCE OBJECTIVES

SKILLS

6007.01 Fabricate or modify plate-fitting devices, including fitting dogs, finger bars, strong backs, clamps, wedges, key plates, fitting bars, lugs, clips, and shims, by identifying requirements from drawings or plans and selecting or making fitting devices to ensure materials are aligned and held in position for welding so they can be connected to the tolerances required by drawings and specifications.

Date Completed

Apprentice

Supervisor/Trainer

6007.02 Prepare welding joints by using such equipment as grinders, gougers, oxyfuel equipment, and bevelling machines so that plate edges meet the requirements of the welding specification.

Date Completed

Apprentice

Supervisor/Trainer

6007.0 FIT PLATE SUBASSEMBLIES AND ASSEMBLIES (cont.)

6007.03 Fit components by performing trial fit of assemblies, checking measurements and fit, and applying plate-fitting devices to correct errors in alignment and measurement so that linear and geometric measurements are within the tolerances required by drawings, specifications, or standards.

Date Completed

Apprentice

Supervisor/Trainer

6007.04 Preheat components or assembly by selecting preheat equipment and temperature measuring devices, planning preheat sequence and procedure, and applying heat so that work is prepared for assembly and interpass temperatures are maintained without causing distortion or excessive residual stresses.

Date Completed

Apprentice

Supervisor/Trainer

6007.05 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 before tacking so that distortion is limited.

Date Completed

Apprentice

Supervisor/Trainer

6007.0 FIT PLATE SUBASSEMBLIES AND ASSEMBLIES (cont.)

6007.06 Perform tack welding by applying the correct tacking sequence so that intended root openings are maintained and do not impede the weld process.

Date Completed

Apprentice

Supervisor/Trainer

6008.0 FIT TUBES AND TUBE ASSEMBLIES

GENERAL PERFORMANCE OBJECTIVE

Fit tube subassemblies and assemblies by preparing tubes and tube sheets for installation, fabricating or modifying tube-fitting devices; preparing welding joints, fitting components, expanding tubes, preheating components or assemblies, planning for control of distortion, and performing tack welding so that measurements are within tolerances allowed, assemblies are dimensionally stable, and fitting/tacking facilitates welding.

PERFORMANCE OBJECTIVES

SKILLS

6008.01 Prepare tubes and tube sheets for installation by cleaning and grinding mill tube ends and preparing tube sheet surfaces so that sizes, contour, and conformation meet the standard identified in the installation drawings and specifications.

Date Completed

Apprentice

Supervisor/Trainer

6008.02 Fabricate or modify tube-fitting devices, including wall bangers, tube clamps, wedges, fitting bars, lugs, clips, and shims, by identifying requirements from drawings or plans and selecting or making fitting devices to ensure that materials are aligned and held in position for welding so they can be fixed in place to the tolerances required by drawings and specifications.

Date Completed

Apprentice

Supervisor/Trainer

6008.0 FIT TUBES AND TUBE ASSEMBLIES (cont.)

6008.03 Prepare welding joints by using such equipment as grinders and bevelling machines so that tube edges meet the requirements of the welding specification.

Date Completed

Apprentice

Supervisor/Trainer

6008.04 Fit components by performing trial fit of assemblies, checking measurements and fit, and applying tube-fitting devices to correct errors in alignment and measurement so that linear and geometric measurements are within the tolerances required by drawings, specifications, or standards.

Date Completed

Apprentice

Supervisor/Trainer

6008.05 Expand tubes by ensuring that tube specification is correct, preparing tubes and materials for connection, expanding tubes, and confirming correct size and connection so that tubes are installed in accordance with specifications and so that linear and geometric measurements are within the tolerances required by drawings, specifications, or standards.

Date Completed

Apprentice

Supervisor/Trainer

6008.0 FIT TUBES AND TUBE ASSEMBLIES (cont.)

6008.06 Preheat components or assemblies by selecting preheat equipment and temperature-measuring devices, planning preheat sequence and procedure, and applying heat so that work is prepared for assembly and interpass temperatures are maintained without causing distortion or excessive residual stresses.

Date Completed

Apprentice

Supervisor/Trainer

6008.07 Control distortion by applying correct weld sequences, presetting parts, and flame straightening or cold straightening so that distortion is limited.

Date Completed

Apprentice

Supervisor/Trainer

6008.08 Perform tack welding by applying the correct tacking sequence so that intended root openings are maintained and do not impede the weld process.

Date Completed

Apprentice

Supervisor/Trainer

6009.0 RIG AND HOIST

GENERAL PERFORMANCE OBJECTIVE

Rig and hoist by selecting and inspecting rigging, positioning and employing rigging, selecting and inspecting hoisting equipment, and operating hoisting equipment so that the rigging is appropriate to the job and is used and stored correctly, the lifting and hoisting equipment is adequate for the job, and the lift is correctly carried out in compliance with employer's procedures, CSA safety standards, Ontario regulations, and material-handling guidelines.

PERFORMANCE OBJECTIVES

SKILLS

6009.01 **Select and inspect rigging equipment** by choosing appropriate equipment required for the specific lift, including cable clamps, chain block hoists, chains, chokers, come-alongs, connectors, ropes, slings, and tuggers; performing preoperational check of rigging through visual checks for defects, including damaged links, frayed cables, cuts in slings, **stripped** 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.

Date Completed

Apprentice

Supervisor/Trainer

6009.0 RIG AND HOIST (cont.)

6009.02 Position and employ rigging by determining the weight, balance, and size of work piece 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 work piece, and it is stored correctly and in good repair in compliance with employer's procedures, CSA safety standards, Ontario regulations, and material handling guidelines.

Date Completed

Apprentice

Supervisor/Trainer

6009.03 Select and inspect hoisting and lifting equipment by selecting equipment required, including gin poles, stiff leg and guy derricks, forklifts, jib-cranes, overhead hoists, portable booms, and spreader bars; performing preoperational 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 manufacturers' procedures.

Date Completed

Apprentice

Supervisor/Trainer

6009.0 RIG AND HOIST (cont.)

6009.04 Operate hoisting equipment by moving and lifting work pieces 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, manufacturers' specifications, CSA safety standards, or Ontario regulation requirements.

Date Completed

Apprentice

Supervisor/Trainer

6010.0 CONSTRUCT AND ERECT PLANT COMPONENTS AND RELATED EQUIPMENT

GENERAL PERFORMANCE OBJECTIVE

Construct plant subcomponents and related equipment, such as boilers, tanks, pressure vessels, heat exchangers, and calandria; and erect components and related equipment for such operations as heating, power generation, refining, fluid transfer, storage, and pollution-control systems so that subcomponents are constructed in accordance with plans and specifications and system components meet industry construction and erection criteria within specified tolerances.

PERFORMANCE OBJECTIVES

SKILLS

6010.01 Construct plant subcomponents and related equipment on site, including boilers, tanks, pressure vessels, heat exchangers, calandria, pollution-control systems, metal-processing furnaces, evaporators, duct work, condensers, digesters, chemical-processing furnaces, water spheres and towers, penstocks and scroll casings, and cogeneration equipment, such as steam generators, by assembling materials; fitting them; and fastening them using welding, bolting, and fibreglassing processes so that subcomponents are constructed in accordance with plans and specifications and with a view to ease of movement, handling, and siting at their final location.

Date Completed

Apprentice

Supervisor/Trainer

6010.0 CONSTRUCT AND ERECT PLANT COMPONENTS AND RELATED EQUIPMENT (cont.)

6010.02 Erect plant components and related equipment on site, including heating, power-generation, refining, fluid transfer, storage, pollution-control, material-processing, and manufacturing systems, by transferring system subcomponents to the erection site, positioning and securing subcomponents in appropriate association, aligning subcomponents, and connecting them through welding or bolting processes so that system components meet industry construction and erection criteria within specified tolerances.

Date Completed

Apprentice

Supervisor/Trainer

6011.0 REMOVE OR DEMOLISH PLANT COMPONENTS AND RELATED EQUIPMENT

GENERAL PERFORMANCE OBJECTIVE

Remove or demolish plant components and related equipment, including boilers, tanks, pressure vessels, heat exchangers, calandria, pollution-control systems, metal-processing furnaces, evaporators, duct work, condensers, digesters, chemical-processing furnaces, water spheres and towers, penstocks, scroll casings, and ancillary structures, by dismantling or demolishing plant components and related equipment and removing dismantled or demolished materials and equipment so that the procedure is done safely and efficiently.

PERFORMANCE OBJECTIVES

SKILLS

6011.01 Dismantle or demolish plant components and related equipment, including boilers, tanks, pressure vessels, heat exchangers, calandria, pollution-control systems, metal-processing furnaces, evaporators, condensers, digesters, chemical-processing furnaces, water spheres and towers, penstocks, and scroll casings, by identifying and planning the sequence of demolition, identifying safety and health concerns relating to exposure to container contents, choosing rigging and hoisting procedures, and cutting apart or unbolting component elements so that the procedure is done safely and efficiently.

Date Completed

Apprentice

Supervisor/Trainer

6011.0 REMOVE OR DEMOLISH PLANT COMPONENTS AND RELATED EQUIPMENT (cont.)

6011.02 Remove dismantled or demolished materials and equipment, including boilers, tanks, pressure vessels, heat exchangers, calandria, pollution-control systems, metal-processing furnaces, evaporators, condensers, digesters, chemical-processing furnaces, water spheres and towers, penstocks, and scroll casings, by developing a removal plan complete with precautions, determining scrap or equipment unit weights for transport, and ensuring the loading of removal transportation so that the procedure is completed in accordance with safety regulations.

Date Completed

Apprentice

Supervisor/Trainer

6012.0 MAINTAIN PLANT SYSTEMS AND ANCILLARY STRUCTURES

GENERAL PERFORMANCE OBJECTIVE

Maintain plant components and related equipment, including boilers, tanks, pressure vessels, heat exchangers, calandria, pollution-control systems, metal-processing furnaces, evaporators, duct work, condensers, digesters, chemical-processing furnaces, water spheres and towers, penstocks, scroll casings, co-gen systems, and ancillary structures, by accommodating the local maintenance environment; following local communication protocols; obtaining permits; determining scope of work; organizing tools, equipment, and materials; repairing and replacing plant systems and ancillary equipment; monitoring progress; and troubleshooting the process so that the appropriate repair and replacement procedures are followed and the operation of the system or equipment is confirmed as being within specifications.

PERFORMANCE OBJECTIVES

SKILLS

6012.01 Accommodate the local maintenance environment by interpreting plant procedures, following local communication protocols, and obtaining required permits or ensuring that they are obtained so that all parties are aware of the maintenance to be done and accommodation can be made in local schedules and procedures.

Date Completed

Apprentice

Supervisor/Trainer

6012.0 MAINTAIN PLANT SYSTEMS AND ANCILLARY STRUCTURES (cont.)

6012.02 Determine the scope of work by inspecting the work requirement, ensuring the site is prepared and safety issues are addressed, and organizing required tools, equipment, and materials so that work requirements are clear; space, time, and local resources are made available; and appropriate materials, tools, and equipment are acquired and on site.

Date Completed

Apprentice

Supervisor/Trainer

6012.03 Repair plant systems and ancillary equipment by confirming the status of system or equipment operation, selecting a repair procedure, carrying out the repair, and confirming that system or equipment operation is within specifications so that system or equipment fault is clear, the system or equipment is taken off line, and lockout/tag-out procedures are followed, an appropriate repair procedure is followed, and operation of repaired system or equipment is confirmed as being within specifications.

Date Completed

Apprentice

Supervisor/Trainer

6012.0 MAINTAIN PLANT SYSTEMS AND ANCILLARY STRUCTURES (cont.)

6012.04 Replace plant systems and ancillary equipment by confirming the extent of system or equipment replacement, removing existing system or equipment, installing replacement, and confirming system or equipment operation is within specifications so that correct system or equipment is removed and replaced and operation of repaired system or equipment is confirmed as being within specifications.

Date Completed

Apprentice

Supervisor/Trainer

6013.0 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 practising good housekeeping in the workplace in accordance with relevant legislation, manufacturers' recommendations, and company policies.

PERFORMANCE OBJECTIVES

SKILLS

6013.01 Identify and take corrective action against potential workplace health and safety hazards, including noxious fumes and dust, high-intensity light, fires, elevated worksites, suspended loads, poor lighting, extreme temperatures, inadequate ventilation, confined spaces, untidy work sites, and uncontrolled power sources, by identifying specific client processes and their hazards, identifying or activating alarm signals, notifying others, and determining the appropriate means of emergency containment or site evacuation so that the potential for personal injury and damage to equipment and the environment are minimized in accordance with applicable manufacturers' instructions, government regulations, and company policies.

Date Completed

Apprentice

Supervisor/Trainer

6013.0 DEMONSTRATE SAFE WORKING PRACTICES AND PROCEDURES
(cont.)

6013.02 Handle, store, and dispose of hazardous workplace materials, including lead, gases, acids, and solvents, so that individuals are protected from injury and the environment from contamination, and safety practices are followed in accordance with the Workplace Hazardous Materials Information System (WHMIS), the *Occupational Health and Safety Act* (OHSA), manufacturers' instructions, and company procedures and policies.

Date Completed

Apprentice

Supervisor/Trainer

6013.03 Comply with workplace legislation relating to health and safety, including the WHMIS guidelines and the OHSA.

Date Completed

Apprentice

Supervisor/Trainer

6013.04 Wear and maintain personal protective equipment, including head, eye, ear, hand, respiratory, body, and foot protection, ensuring that correct fit and protection is provided to the wearer for the specific task performed, in accordance with applicable government regulations, manufacturers' specifications, and company policy.

Date Completed

Apprentice

Supervisor/Trainer

6013.0 DEMONSTRATE SAFE WORKING PRACTICES AND PROCEDURES
(cont.)

6013.05 Practise 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.

Date Completed

Apprentice

Supervisor/Trainer

APPRENTICE RECORD

APPRENTICE NAME (Print):

EMPLOYER INFORMATION	
Training Agreement #	
Name	
Address	
Telephone	
E-mail Address	

SUMMARY OF TRAINING	
Employment Start Date	
Employment End Date	
Total hours of training and instruction between dates of employment	

Date Completed

Apprentice

Supervisor/Trainer

APPRENTICE RECORD

APPRENTICE NAME (Print):

EMPLOYER INFORMATION	
Training Agreement #	
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Employment End Date	
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Date Completed

Apprentice

Supervisor/Trainer

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Telephone	
E-mail Address	

SUMMARY OF TRAINING	
Employment Start Date	
Employment End Date	
Total hours of training and instruction between dates of employment	

Date Completed

Apprentice

Supervisor/Trainer

APPRENTICE COMPLETION FORM

APPRENTICE NAME	
Print	
Signature	
Social Insurance Number	

Skill Sets when completed should be signed by the supervisor/trainer and presented with this completion form to your local Apprenticeship Client Services Office. Any supporting documentation should also be attached.

In-School Completed Yes () No () Not applicable ()
(Proof to Be Provided)

Hours Completed as Yes () No () Not applicable ()
per Contract:

EMPLOYER INFORMATION	
Name	
Address	
Telephone	
E-mail Address	
Signature of Signing Authority	

You will be required to disclose this signed form to the Ministry of Training, Colleges and Universities in order to complete your program. The Ministry will use your personal information to administer and finance Ontario's apprenticeship training system. For further information please see the notice/declaration for collection of personal information that is referenced in the table of contents of this training standard.