

# CERTIFICATION GUIDE FOR APPLICANT COMPANIES TO **CSA STANDARDS**

## **W47.1, W47.2, W55.3 & W186**

### **Congratulations and Welcome to the CWB Certification Application Process**

This guide will help you, as an applicant company, to meet the requirements of certification specified in CSA Standards W47.1, W47.2, W55.3 and W186. Additional information can be obtained by contacting any CWB Office by phone, fax or email.

We're ready to help. Call us!

**Phone: 1.800.844.6790**

**International: 1.905.542.1312**

**Fax: 1.905.542.1318**

**Email: [info@cwgroup.org](mailto:info@cwgroup.org)**

**[www.cwbgroup.org](http://www.cwbgroup.org)**



**cwb**certification

## Here is your CWB Certification Guide. Now what?

Thank you for considering CWB certification. Certification is not simply a set of standards for the welding and joining industry, but is a significant and worthwhile investment in the future of your company. CWB Certification provides the support and means for you to effectively grow and promote your business. CWB Group is committed to the welding and joining industry and to providing the best possible access to a wealth of services and support.

Your "Certification Guide" contains all the necessary materials to complete the certification process. To help you understand the process, information about the applicable CSA Standards, study guides and other relevant documents are also included. Certification to CSA Standards W47.1, W47.2, W55.3 and W186 is obtained upon completion of the following 6 steps.

### Step 1 Complete the Forms



Several forms must be completed and returned to the CWB. This will help us identify your personnel and list the experience of your welding supervisors and engineers.

- Form 151 – List of Personnel (required with or prior to Forms 155 / 159 being submitted)
- Form 155 – Welding Supervisor Resume
- Form 159 – Welding Engineer Declaration (required for Division 1 or 2 companies, if applicable)

All forms are to be forwarded to [forms@cwbgroup.org](mailto:forms@cwbgroup.org) for processing. You will receive an acknowledgment email once processing is completed.

### Step 2 Qualify your Welding Supervisor(s)



Each company is required to employ an adequate number of Welding Supervisors, personnel with the required welding related experience, to control your company's welding operations. The designated welding supervisor shall have a minimum of five (5) years of welding-related experience pertinent to the company's type of operations. Reduction in the required years of experience may be claimed based on individual education qualifications. Please contact the CWB Group or refer to each CSA Standard for particulars. These supervisors will also need to complete written examinations on welding symbols, weld faults, quality control and inspection methods and the following standard(s) (as per the applicable CSA Standard for which CWB certification is required):

**For certification to CSA Standard W47.1**

- **CSA Standard W47.1** | *Certification of Companies for Fusion Welding of Steel*
- **CSA Standard W59** | *Welded Steel Construction (Metal Arc Welding)*

**For certification to CSA Standard W47.2**

- **CSA Standard W47.2** | *Certification of Companies for Fusion Welding of Aluminum*
- **CSA Standard W59.2** | *Welded Aluminum Construction*

**For certification to CSA Standard W55.3**

- **CSA Standard W55.3** | *Certification of Companies for Resistance Welding of Steel and Aluminum*

**For certification to CSA Standard W186**

- **CSA Standard W186** | *Welding of Reinforcing Bars in Reinforced Concrete Construction*

In addition, each Welding Supervisor will be given a brief verbal examination on your company's welding equipment, drawings, and welding procedures

The qualification examinations on welding symbols, weld faults, quality control and inspection methods may be waived if the Welding Supervisor holds a diploma from a recognized course in welding fundamentals or weld quality control and inspection. See CWB Form 155 - Welding Supervisor Resume for a list of applicable exemptions.

Examinations are normally held in a CWB Regional office (see last page for locations). Courses are frequently provided on each of the subjects required for qualification. Examinations may also be written onsite at your facility with invigilation by your CWB CSR, at CWB offsite exam sessions (Langley, Calgary, Saskatoon, Moncton, Halifax, St. John's), online through ProctorU or at a CWB approved examination centre by submitting our CWB Form 196 - Exam Request Form or by visiting our CWB website at <https://www.cwbgroup.org/education/examination-centres>. Fees may apply to these two last two options.

Please contact the CWB Group to purchase any required study guides designed to prepare candidates for the Welding Supervisor exams.



### Step 3 Qualify your Professional Engineer(s)



A company applying for certification in Division 1 (full time employed engineer) or Division 2 (part time retained engineer) (See *Divisions of Certification on Page 4*) of CSA Standards W47.1, W47.2, W55.3, and W186 must either qualify a welding engineer, or designate a previously CWB approved welding engineer, who will be responsible for the welding related activities as required by the company. Each standard specifies the requirements for qualification.

For companies seeking CWB certification in Division 1 (full time employed engineer), the requirements for CWB approval are as follows:

**ENTRY CONDITIONS:** Each welding engineer must be a registered professional engineer in the province he/she is practicing. When the company seeking certification is located outside of Canada, the welding engineer must demonstrate comparable qualifications to the satisfaction of the CWB.

This criterion is confirmed through a review of the specified Provincial or Territorial Professional Engineer Association's membership roster or directory of practitioners. Alternatively the candidate may be asked to provide evidence of a current acceptable license to practice engineering.

**EDUCATION:** Each welding engineer must demonstrate a basic knowledge of the material being welded, welding fundamentals, welding metallurgy, and welding procedures and practice.

This criterion is confirmed through the review of qualifications granted by educational institutions which provide welding related programs. The CWB Group, and the International Institute of Welding (IIW), among others, are examples of organizations which provide courses or qualifications that have been reviewed and recognized as having met this criterion. If the educational requirements of the applicable standard have not been met, additional courses may be required.

Note: CSA Standard W47.1 Annex A.1 provides additional guidance in regards to the body of knowledge engineers are expected to demonstrate in order to qualify under this standard.

CWB Education provides modular learning packages (as listed below) which have been reviewed and accepted as meeting the educational requirements of the specified standard as indicated in the Education section above.

- CSA W47.1: Procedures Engineer Module Package  
(<https://www.cwbgroup.org/store/modules/procedures-engineer-module-package>)
- CSA W47.2: Aluminum Welding Module Package  
(<https://www.cwbgroup.org/store/modules/aluminum-welding-module-package>)

**EXPERIENCE:** Each welding engineer must demonstrate five (5) years of welding related experience specific to the qualification being sought.

This criterion is confirmed through a review of documentation submitted by the engineer. Documentation demonstrating activities such as welding inspection, welding supervision, weld testing, weld designing or detailing, welding instruction, fabrication planning, manual, semi-automatic, mechanized, or automatic welding and welding procedure development and testing are all considered relevant supporting documents. This list of activities is not exhaustive and other forms of welding related documentation may be acceptable.

**CODES AND STANDARDS:** Each welding engineer must be knowledgeable in the applicable codes and standards. This criterion is demonstrated through the candidate's successful completion of the CWB examinations on the applicable welding standards.

Companies seeking CWB certification in Division 2 (part time retained engineer) can locate a listing, by province, of previously CWB approved engineers at: [https://www.cwbgroup.org/site-search?search\\_term=engineers+listing](https://www.cwbgroup.org/site-search?search_term=engineers+listing).

**Engineers must be designated on a CWB company file by the company's Certification Contact completing the CWB Form 151 - List of Personnel (named on Line #4). Each designated engineer must complete and submit CWB Form 159 - Welding Engineer Declaration for review and approval. All forms can be emailed to [forms@cwbgroup.org](mailto:forms@cwbgroup.org) for processing.**



#### Step 4 Submit your Company's Welding Procedures for Approval



The approved employed (Division 1) or retained (Division 2) engineer of each company must prepare and submit to the CWB for acceptance, a detailed set of welding procedures consisting of:

- Welding Procedure Specifications (WPS) for each welding process used.
- Welding Procedure Data Sheets (WPDS) for each welding process used, joint configuration, electrode type, etc.

In certain circumstances, based on the welding procedure submission, procedure qualification tests may be required to verify the acceptance of the welding procedure data sheets.

The qualified Welding Supervisor will be required to prepare and submit the above documents if the company is to be CWB certified as Division 3.

All procedures and data sheets are to be forwarded to: [procedures@cwbgroupp.org](mailto:procedures@cwbgroupp.org) for processing. You will receive an acknowledgment email once completed.

#### Step 5 Qualify your Welders



All welders, welding operators and tack welders employed by the company must be tested for the processes and positions of welding which they use in production.

For welder testing, please contact your CWB Certification Services Representative (CSR) directly or, dependent on your area, please contact us at 1.800.844.6790:

- Western Canada, Ext. 577 – [schedule.western@cwbgroupp.org](mailto:schedule.western@cwbgroupp.org)
- Ontario, United States and International, Ext. 377 – [schedule.central@cwbgroupp.org](mailto:schedule.central@cwbgroupp.org)
- Québec and Eastern Canada, Ext. 477 – [schedule.eastern@cwbgroupp.org](mailto:schedule.eastern@cwbgroupp.org)

#### Step 6 Review and Recommendation for Certification



From time to time, a CWB CSR will visit your company to complete an audit report and provide assistance to complete the certification requirements. Once all of the above are completed and all other items, such as electrode storage facilities (shop and field), general appearance of welding, etc., are acceptable, then the company is recommended for certification. Your file will be reviewed for certification and approval is granted by the CWB Registrar.

Upon satisfactory completion of the final review procedure, the company is issued a Letter of Certification, a Letter of Validation and a Document of Certification. Permission is also granted to use the CWB's registered trademark on the company's letterhead and promotional material and your company is listed on our website as a CWB certified company.

### *Then it's Congratulations and Welcome to CWB Certification!*

#### Checklist

- ☐ 1) You've completed the forms - *see Page 1*
- ☐ 2) Qualify your Welding Supervisor(s) - *see Page 1*
- ☐ 3) Qualify or Designate your Professional Engineer(s) - *see Page 2*
- ☐ 4) Submit your Company's Welding Procedures for Approval - *see Page 3*
- ☐ 5) Qualify your Welders - *see Page 3*
- ☐ 6) Review and Recommendation for Certification - *see Page 3*

## Divisions of Certification

### CSA Standards W47.1, W47.2 and W55.3

CSA Standards W47.1, W47.2 and W55.3 contain provisions for the certification of a company in one of three Divisions. The Division chosen will depend on the type of work being performed (see chart below for assistance), and the authority to which the company is responsible (i.e. municipality, owner, contractor, etc.). CSA Standard W186 contains provisions for the certification of a company in one of two Divisions as the company is required to employ or retain a qualified engineer.

#### Division 1

To be certified in Division 1, the company must employ, on a full time basis, a registered professional engineer(s) responsible for welding related activities specified by the company.

#### Division 2

To be certified in Division 2, the company must retain, on a part time basis, a registered professional engineer(s) responsible for welding related activities specified by the company.

#### Division 3

The company is not required to have a registered professional engineer, either employed or retained. The WPS and WPDS are submitted by the approved welding supervisor for the company.

## FAQ?

### *Is there a difference in the cost to get certified for Divisions?*

No, the application and annual fee your company will pay for CWB Certification is the same regardless of the division of certification you choose. However, if you decide to retain a welding engineer, there will be costs associated with this service as negotiated between your company and the welding engineer.

### *How do I find an approved welding engineer?*

Our CWB website [www.cwbgroup.org](http://www.cwbgroup.org) provides a list of approved engineers that work in your Province. To request a copy of this listing to be sent to you, please call us at 1.800.844-6790. Note that welding engineers must meet the requirements of the applicable CSA Standard and be accepted by the CWB.

### *How do I know what division is right for my company?*

Depending on the type of work your company is doing, some design and product codes are specific about the division required for certification, while others are unspecified. In certain cases, the owner of the project / structure / final product may specify the division in the contract documents. Some common examples are:

Code / Standard / Product Specification	Division Required
CSA S16 (Steel Structures) *	Division 1 or 2. Division 3 is permitted only if the work is sublet to the Division 3 company by a Division 1 or 2 company.
CSA S157 (Aluminum Structures)	Division 1 or 2. Division 3 is permitted only if the work is sublet to the Division 3 company by a Division 1 or 2 company.
CSA B44 (Safety Code for Elevators)	No Division specified
CSA Z267 (Safety Code for Amusement Rides)	No Division specified
CSA B167 (Safety Standards for Cranes)	No Division specified
CSA S6 (Bridge Design Code)	Division 1 or 2

*\*Note: CSA S16 and the related requirements for CWB certification generally cover the fabrication of structural steel, miscellaneous metals (e.g. stairs, guardrails) and modifications to existing steel structures. Please call the CWB at 1-800-844-6790 if you have any questions.*

### *Can I change divisions once I am certified?*

Yes, your company can apply for a change of division at any time. There is no charge from the CWB to make this change.

# CERTIFICATION GUIDE FOR APPLICANT COMPANIES TO CSA STANDARDS W47.1, W47.2, W55.3 & W186

Welding Supervisor Examinations for CSA Standards W47.1, W47.2, W55.3 & W186				
Written Code Examinations				
Exam	Format	Time (Minutes)	Study Materials	Comments
CSA W47.1	Open book 40 multiple choice questions	90	CSA Standard W47.1 and applicable study guide	Bring the latest edition of CSA Standard W47.1 only
CSA W59	Open book 40 multiple choice questions	90	CSA Standard W59 and applicable study guide	Bring the latest edition of CSA Standard W59 only
CSA W47.2	Open book 40 multiple choice questions	90	CSA Standard W47.2 and applicable study guide	Bring the latest edition of CSA Standard W47.2 only
CSA W59.2	Open book 40 multiple choice questions	90	CSA Standard W59.2 and applicable study guide	Bring the latest edition of CSA Standard W59.2 only
CSA W55.3	Open book 25 multiple choice questions	45	CSA Standard W55.3	Bring the latest edition of CSA Standard W55.3 only
CSA W186	Open book 40 multiple choice questions	90	CSA Standard W186	Bring the latest edition of CSA Standard W186 only
Written Examinations				
Welding Symbols	Closed book 25 multiple choice questions	45	Study guide	No reference material allowed during the exam Know the meaning and position of weld symbols shown on drawings
Weld Faults	Closed book 25 multiple choice questions	45	Study guide for either steel or aluminum	No reference material allowed during the exam Know the causes and corrections of various weld faults Know the terminology used to describe the parts of a fillet weld and fillet weld defects
Quality Control & Inspection Methods	Closed book 25 multiple choice questions	45	Study guide for either steel or aluminum	No reference material allowed during the exam Know the principles of visual inspection (before, during and after welding) Be familiar with the applications and limitations of various non-destructive inspection methods
Verbal Examinations				
Welding Equipment	Verbal	Not applicable	Company's welding equipment	Know the operating characteristics, maintenance and limitations of the company's welding equipment
Drawings	Verbal	Not applicable	Company's drawings	Be prepared to explain what is required when presented with drawings of the company's welded products
Welding Procedures	Verbal	Not applicable	Company's welding procedures	Be prepared to demonstrate the use of welding procedure specifications and data sheets



## Study Guides for Welding Supervisors

For Examinations for CSA Standards W47.1, W47.2, W55.3 and W186

### CWB Certification to CSA Standard W47.1:

- Welding Supervisor Steel Study Guides:
  - Welding Supervisor Course Background Material
  - Welding Symbols – Study Guide
  - Weld Discontinuities – Study Guide
  - Quality Control and Inspection Methods – Study Guide
  - W47.1– Study Guide
  - W59 – Study Guide

<https://www.cwbgroup.org/store/course-materials/welding-supervisor-steel-study-guides>



### CWB Certification to CSA Standard W47.2:

- Welding Supervisor Aluminum Study Guides:
  - Welding Supervisor Aluminum Course Background Material
  - Welding Symbols – Study Guide
  - WSA Weld Discontinuities – Study Guide
  - WSA Quality Control and Inspection Methods – Study Guide
  - W47.2– Study Guide
  - W59.2 – Study Guide

<https://www.cwbgroup.org/store/course-materials/welding-supervisor-aluminum-study-guides>

### CWB Certification to CSA Standards W55.3 and W186:

- There are no study guides available for the specific code exams for CSA W55.3 and/or CSA W186. Welding Supervisors previously approved to CSA W47.1 are exempt from rewriting the Weld Symbols, Weld Faults, and Quality Control and Inspection Methods exams under CSA W186. Welding Supervisor candidates under CSA W55.3 are only required to write the open book examination on CSA W55.3 as this examination is comprehensive in nature and meets the requirements of the standard alone.

Welding Supervisors having previously written the Weld Symbols exam are only required to write this exam once for a Standard approval.

*Previously CWB approved Welding Supervisors are not required to rewrite the specified examinations. The verbal interview pertaining to your company's welding equipment, drawings and welding procedures is required by each designated Welding Supervisor prior to approval. Contact 1.800.844.6790 for any questions or concerns.*

## Obligations of a CWB Certified Company

It is the responsibility of each company to maintain compliance with the standard on a continual basis. Listed below are the minimum requirements that must be met:

### Personnel

1. Employ an adequate number of qualified Welding Supervisors to supervise all shop and field welding activities.
2. Ensure that the Welding Supervisor is qualified and has the authority and time to control welding operations in the shop and/or field.
3. Employ or retain the services of engineers qualified in accordance with the appropriate standard (*this requirement is not applicable to Division 3 companies in CSA Standards W47.1, W47.2 and W55.3*).
4. Ensure that all welders are qualified for the positions and processes that they are expected to use.
5. Inform the CWB immediately of any changes in designated engineering, supervisory or quality control personnel, the name and/or relocation of plant, and changes in contact information, etc.

### Procedures

1. Ensure that the company's welding procedures cover all joints, processes and positions used in fabrication/erection, and are up to date and approved by the CWB.
2. Ensure that the company's welding procedures are available to all those personnel requiring them and are followed in the design office, shop and field.

### Equipment

1. Ensure that all welding equipment and auxiliary equipment are maintained in good repair.
2. Ensure that all welding equipment is adequate to produce the required weldments.

### Workmanship

1. Ensure that welding performed by the company and its subcontractors is continuously done in accordance with the requirements of the certification standard and the approved welding procedures.
2. Maintain weld quality and workmanship at the levels specified by the design or product standard.
3. Ensure that all welding is completed using certified consumables that are stored and reconditioned in accordance with the applicable standard.

### Maintain Records and Reports

1. Maintain an up to date file containing copies of the necessary reports and forms, etc.
2. Ensure that copies of the company's welding procedures, welder, welding operator and tack welder employment and qualification reports (CWB Form 108 or an equivalent) and engineer's reports (CWB Form 107 or an equivalent) are up to date and available to the CWB's CSR at time of audit visit.

### Proper Use of the CWB Certification Mark

1. Companies that obtain certification to CSA Standards W47.1, W47.2, W55.3 and W186 are granted permission to use the CWB's Certification Mark in their advertising, promotional material and other literature only to indicate their certification.
2. The cert mark may not be altered or used in any way that could be interpreted as meaning the certification of the company's products or services.
3. The cert mark must not be used in conjunction with any modifying terms or phrases and must not be misleading as to the extent of certification.
4. Use of the CWB's Certification Mark must be discontinued upon the termination of certification.



## **Preparation of Company Welding Procedures**

For companies applying for certification to CSA Standards W47.1, W47.2, W55.3 and W186, their welding procedures will consist of the following separate documents:

- Welding Procedure Specification(s) (WPS)
- Welding Procedure Data Sheets (WPDS)

Sample documents are available upon request from your CWB CSR or by calling 1.800.844.6790.

### **Welding Procedure Specifications (WPS)**

A company must have a Welding Procedure Specification outlining the general welding procedure to be followed in the construction of weldments built in accordance with any governing design or manufacturing standard, or both.

A separate WPS is required for each welding process (e.g. SMAW, FCAW, etc.) and is usually required to define the welding of special applications (e.g. stainless steels, Q & T steels, welding with controlled heat inputs, etc.).

All pertinent essential variables should be defined numerically. A special effort should be made to convey information on the actual process and welding technique practised in the shop. It is also suggested that ranges of operating parameters for the various sizes of electrodes used be shown in the WPS.

Each WPS must be signed and/or sealed by the designated engineer, or the welding supervisor, for Division 3 companies.

### **Welding Procedure Data Sheets (WPDS)**

A Welding Procedure Data Sheet lists specific information required for the actual welding of each joint, and defines the joint geometry, layer and pass sequence, the welding symbol, material, welding and other parameters. Each WPDS must be signed and/or sealed by the designated engineer, or the welding supervisor for Division 3 companies.

Companies applying for certification to CSA Standard W47.1 may submit a WPS in lieu of individual data sheets for each prequalified joint. See Clause 11.1.1 of CSA Standard W47.1 for details.

### **General Comments Regarding WPS AND WPDS**

All WPS's and WPDS's for CSA Standards W47.1, W47.2 and W186 must be submitted to the Canadian Welding Bureau for approval. WPS's and WPDS's for CSA Standard W55.3 shall be made available to the CWB CSR for review.

The company's welding procedures must be made available for use by the shop and field welding supervisors, as well as by the engineering and detailing staff, and other authorized personnel, including the CWB CSR.

The company's welding procedures must be updated upon subsequent issues of pertinent CSA Standards and extended to include the use of any additional welding processes, or new joint geometry, or joints welded in positions other than allowed by existing WPS's and WPDS's.

Companies applying for certification to CSA Standard W47.1 or W47.2 may qualify an uncertified electrode for their own use by completing the electrode and procedure qualification tests specified in CSA Standard W47.1 or W47.2.

There are no provisions for the use of uncertified electrodes in CSA Standard W186.

***To reduce the costs of qualification testing and thus certification, all welding electrodes used by a company must be certified by the CWB to the appropriate electrode standard.***



## **Prequalified Joints**

Certain joint configurations that conform to the provisions of Clause 10 of CSA Standard W59 are deemed prequalified. Such joints may be approved for use without performing procedure qualification tests.

Welding procedures must also conform to Clauses 4, 5 and 10 of CSA Standard W59 in order for the joint to be considered prequalified. Prequalified joints exist for the shielded metal arc (SMAW), submerged arc (SAW), gas metal arc (GMAW), flux (FCAW) and metal-cored arc welding (MCAW) processes.

There are no prequalified joints in CSA Standards W59.2 and W186.

Joint details may depart from those prescribed in Clause 10 of CSA Standard W59. However, in such cases the proposed welding procedure may require qualification testing to be performed in accordance with the requirements of Clause 11 of CSA Standard W47.1.

## **Operational Control Procedure - CSA Standard W47.2**

Companies applying for certification to CSA Standard W47.2 must implement an Operational Control Procedure and document for each project. The procedure must contain as a minimum the following information:

1. Base Material
2. Filler Material
3. Requirements for WPDS's
4. Preweld Checklist
5. Post Weld Visual Inspection

A sample "ALUMINUM OPERATION CONTROL DOCUMENT" is included in W47.2, however this format is not mandatory. Your organization may already have processes in place to comply with these requirements. Further information on this requirement can be found at [www.cwbgroup.org](http://www.cwbgroup.org).

## **Quality Program - CSA Standard W55.3**

Companies applying for certification to CSA Standard W55.3 shall have in place a quality system for resistance welding.

The system shall contain, at minimum, the following items:

1. Organizational structure of the company
2. WPS's and WPDS's with accompanying procedure qualification records
3. Welding-related work instructions, if applicable
4. Welding inspection and test plans; must implement an Operational Control Procedure and document for each project.

The company's resistance welding quality system shall be included as part of the CWB's periodic review of the company's resistance welding operations.

To book your certification audit or your six (6) month verification audit, please contact your CWB CSR directly or, dependent on your area, contact:

For Western Canada:

[schedule.western@cwbgroup.org](mailto:schedule.western@cwbgroup.org)  
1.800.844.6790, Ext. 577

For Central Ontario, United States and International:

[schedule.central@cwbgroup.org](mailto:schedule.central@cwbgroup.org)  
For Canada / USA: 1.800.844.6790, Ext. 377  
For International: 1.905.542.1312, Ext. 377

For Québec and Eastern Canada:

[schedule.eastern@cwbgroup.org](mailto:schedule.eastern@cwbgroup.org)  
1.800.844.6790, Ext. 477

## Certification Timetable/Checklist

The following certification timetable/checklist is for use as an aid to provide you with a summary of the required items that your company must complete throughout the certification process. This timetable/checklist should be completed in the presence of your CWB Certification Services Representative at his/her initial visit to your company.

It is recommended that the order shown on the certification timetable/checklist be followed to save time and money.

Certification Timetable/Checklist (Note: all items listed may not be required)																			
Certification Bench Mark		Task Completion Dates																	
Recommended Order of Completion																			
1. Submit CWB Forms 151, 155, 159 and 633 (If required)																			
2. Welding Supervisor(s) to complete exams by:																			
(i)																			
(ii)																			
(iii)																			
3. Engineer(s) to complete exams by:																			
(i)																			
(ii)																			
4. Engineer(s) to complete educational requirements by:																			
(i)																			
(ii)																			
5. Initial submission of welding procedures:																			
6. Procedure qualification testing completed by:																			
7. Revised welding procedures submitted by:																			
8. Welder qualification tests completed by:																			
9. Submission of alternate welder qualification test data sheets (Form 161):																			
10. Welder qualification transfer request submitted:																			
11. Define Operational Control Procedure (For W47.2 only):																			
12. Prepare Quality Program (For W55.3 only):																			
13.																			
14. All requirements completed by:																			

The CWB, federally incorporated, "not-for-profit" organization is accredited by the Standards Council of Canada as a Certification Body for the administration of CSA Standards W47.1, W47.2, W48, W178.1 and W186.



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**OFFICES ACROSS CANADA**

**Western Operations:**      **206 – 19 Avenue, Nisku Industrial Park, Nisku, Alberta T9E 0W8**  
**203 – 1555 St. James Street, Winnipeg, Manitoba R3H 1B5**

**Ontario Operations:**      **8260 Parkhill Drive, Milton, Ontario L9T 5V7**

**Québec Operations:**      **4430 rue Garand, Laval, Québec, H7L 5Z6**