

## **Q & A on Application for Certification as a Steel Detailer (RSD, CSD or ASD)**

September, 2010

### **1. Who is eligible for certification?**

Persons working as Steel Detailers will wish to consider professional certification.

They must have both education and experience qualifications as a Steel Detailer; they must also be of good character and reputation.

### **2. What are the Categories of Certification?**

There are three categories of certification, **Registered Steel Detailer (RSD)**, **Certified Steel Detailer (CSD)**, and **Associate Steel Detailer (ASD)**. See section 4 for certification requirements. Associate Steel Detailer recognition is available for persons working toward full certification.

The following outlines the profile of each:

#### **2.1 Registered Steel Detailer (RSD)**

Function: Working independently or with limited supervision, an RSD may perform routine steel connection designs and details with the minimum experience required for certification. With added experience, more complex designs and details will be incorporated into the RSD's practice.

An RSD prepares and maintains records, reports and other materials related to the work. An RSD is able to read and interpret plans and specifications in the discipline and jurisdiction in which the Detailer is working.

Responsibilities may include public relations, liaison and coordination with others incidental to the work. An RSD exercises sound judgment and has knowledge of government regulations and policies.

Duties: Work assignments are normally in the form of designation of areas or portions of the project which they are to handle, together with engineering drawings, specifications, standards, codes, etc., required by the contractual standards, codes, etc., required by the contractual requirements and/or legal authorities.

Within the scope of the particular assignment, the RSD exercises broad latitude in determining how best to accomplish the ends required, they work under minimum and general supervision.

An experienced RSD personally prepares layouts, executes calculations and/or other design work of a complex and critical nature, and to the extent that others are designated to support them, they direct and supervise others in less critical and/or complex work.

An experienced RSD personally prepares the most difficult and critical finished drawings or portions of same, delegating and supervising simpler portions to the extent possible.

Experienced RSDs check layouts, calculations and finished drawings prepared by others. They ensure that all work done by anyone within the scope of their assigned work is properly checked by a person other than the one whose work is being checked.

Experienced RSDs personally make all checking corrections and engineering corrections on their own work and ensure that on work done by others under their supervision, the corrections are made by the individual who created the original work.

Responsibilities: To ensure that all work performed by themselves, or others under their supervision, is correct and in full conformity with all contractual, legal and ethical standards. To ensure that details are such that fabrication will be as economical as possible within the constraints of the contract documents and the fabricator's standards. To execute detailing as efficiently and economically as possible.

Qualifications: The RSD must have expert knowledge of all of the graphical, mathematical and analytical skills employed in Steel Detailing. These may have been acquired through any appropriate combination of formal training, study and/or experience. They must have the ability to determine the optimum approach to the problems to be solved and to carry out the work with minimum direction and/or supervision. They must also have the ability to direct and supervise junior drafters.

Criteria for Evaluation: Completeness and accuracy of work; speed of work; relative number and types of checking and/or customer corrections required; effective utilization of personnel; speed and thoroughness of checking; reading and other activities to maintain and improve skills and to remain conversant with current industry standards and codes of practice.

## **2.2 Certified Steel Detailer (CSD)**

Function: Working independently or with limited supervision the CSD may perform routine steel detailing.

A CSD may perform steel detailing encompassing various types of construction works and must display a demonstrated expertise in a specialized field of detailing.

A CSD is responsible for compiling pertinent data and maintaining records to be used in the preparation of reports.

Responsibilities may include public relations, liaison and coordination with others incidental to the work. A CSD exercises sound judgment and has knowledge of government regulations and policies.

Duties: Work assignments to CSDs are generally more limited in scope, more specific as with respect to what is to be done, and more detailed as to how it is to be done, than those of an RSD.

The degree of latitude allowed the CSD varies with the complexity and criticality of the work and the development of the individual's skills.

As an example, perhaps a number of beam/column joints are to be similar but the specific sizes of members varies. The basic geometry would have been established by an RSD and perhaps the limiting conditions worked out in detail. The CSD would then work out the details of each of the other combinations. Such work may be mathematical, graphical or any other combination.

Working from layouts and/or data, developed by themselves or others, the CSD prepares finished drawings ranging from the simplest to the moderately complex.

The CSD may check work done by Associate Steel Detailers (ASD).

The CSD makes all checking and/or engineering corrections required on all work which they have prepared.

Responsibilities: To execute assignments accurately, thoroughly and efficiently. When situations are encountered where the CSD is uncertain as to what to do or how to do it, to request assistance, amplification, explanation, etc. from the responsible RSD or Project Supervisor. To read, take courses and otherwise expand and develop their capabilities.

Qualifications: The qualifications of the CSD differ from those of the ASD in that they must have demonstrated ability to execute assigned work with a minimum of supervision.

Criteria for Evaluation: Completeness and accuracy of work; speed of work; relative number and types of checking and customer corrections required; degree and frequency of supervision required; activity to maintain and improve skills.

### **2.3 Associate Steel Detailer (ASD)**

Function: The ASD is appointed by the office manager, assigned to a team of detailers for specific projects, and takes direction from the project supervisor and/or senior detailer. The ASD exercises no authority except as may be specifically delegated.

Duties: Under the direction and supervision of senior Detailers an ASD executes graphical and/or mathematical work ranging from the simplest to the moderately difficult. Assignments of work are relatively specific and detailed, both as to what to do and how to do it. The degree of latitude allowed increases as their knowledge increases and competence is demonstrated.

Most assignments, whether graphic or mathematical, comprise detail work following layouts, samples, data, equations, etc. developed by higher level personnel or provided by standards or codes of various kinds.

The ASD personally makes all checking and/or engineering corrections required on work which they have done.

At times the ASD performs work of a clerical, general or manual nature as may be assigned.

Responsibilities: Prompt, thorough and accurate execution of assigned work; reading and studying to advance job skills.

Qualifications: The ASD is required to have working knowledge of the English language, written and oral, adequate for effective communication with others and the ability to read and understand reference materials. They are required to have excellent knowledge of mathematics, including arithmetic, algebra, geometry and trigonometry and of the tools and techniques of engineering drawings.

Criteria for Evaluation: Ability and grasp and follow oral and written instructions; completeness and accuracy of work; speed of work; relative number of errors to be corrected; supervision required; activity in improving skills.

### **3. What is involved in obtaining certification?**

The certification program and process have been designed to recognize the value of formal academic training as well as experiential learning. The certification program takes into consideration an applicant's formal education credentials as well as workshops and seminars attended, papers presented, and related forms of education and training. A considerable amount of weight is also placed on competencies achieved in a work place environment. To help a Steel Detailer develop a career path and track his or her progress, a certified person will be required to maintain a 'Steel Detailer's Log'. This Log will also help in the review of an application for certification and re-classification.

#### **For first time applicants**

Complete the Application for Certification following the guidelines in this information bulletin.

Successfully complete the ASTTBC Professional Practice and Ethics Exam.

#### **For a Certified member seeking reclassification**

If you are an Associate Steel Detailer (ASD) seeking reclassification to Certified Steel Detailer (CSD) or CSD seeking reclassification to Registered Steel Detailer (RSD), you will use the Application for Certification.

### **4. What is required for certification?**

#### **Registered Steel Detailer (RSD)**

An RSD is a person who has met the required standards of certification and who practices at the required level established by the Board.

An RSD will be required to demonstrate competency in accordance with the Profile which will normally require completion of the following:

EITHER OPTION 'A'

- (a) Applied Science Technologist (AScT) certification with ASTTBC in Building or Civil Technology, and
- (b) A minimum of three (3) years related and acceptable experience in Steel Detailing.

OR OPTION 'B'

- (c) Graduate of a recognized program in Building, Civil or Structural Technology, or equivalent who has completed basic courses in Steel Detailing, Connection Design and Welding Fundamentals.
- (d) In addition, the graduate must have completed three (3) years of related and acceptable experience in steel detailing.

OR OPTION 'C'

- (e) Certified Steel Detailer standing plus a minimum of four (4) advanced level courses selected from the Steel Detailing Course Guideline, and
- (f) A minimum of five (5) years total related and acceptable experience in Steel Detailing.

OR OPTION 'D'

- (g) Other equivalent qualifications acceptable to the Board.

PLUS ALL OPTIONS MUST

- (h) Demonstrate knowledge of CSA-S16 Code, and
- (i) Complete the ASTTBC Professional Practice and Ethics Exam.

**Certified Steel Detailer (CSD)**

A CSD is a person who has met the required standards of certification and who practices at the required level established by the Board.

A CSD will be required to demonstrate competency in accordance with the Profile which will normally require completion of the following:

EITHER OPTION 'A'

- (a) Certified Technician (CTech) certification with ASTTBC in Building or Civil technology, and
- (b) A minimum of two (2) years related and acceptable experience in Steel Detailing.

OR OPTION 'B'

- (c) Graduation from a recognized drafting program with specialization in Steel Detailing or graduation and at least three (3) intermediate Steel Detailing or related courses selected from the Steel Detail Course Guideline, and
- (d) A minimum of four (4) years related and acceptable experience in Steel Detailing.

OR OPTION 'C'

- (e) Other qualifications acceptable to the Board.

PLUS ALL OPTIONS MUST

- (f) Demonstrate knowledge of CSA-S16 Code, and
- (g) Complete the ASTTBC Professional Practice and Ethics Exam.

**Associate Steel Detailer (ASD)**

An ASD is a person who has met the required standards of certification and who practices at the required level established by the Board.

An ASD will be required to demonstrate competence in accordance with the profile, which will normally require completion of the following:

EITHER OPTION 'A'

- (a) Graduate of a recognized program in Drafting-Architectural, Steel Detailing and Computer Aided Drafting, or equivalent.

OR OPTION 'B'

- (b) A minimum of twelve (12) recognized entry and intermediate level engineering and drafting courses selected from the Steel Detailing Course Guideline.

OR OPTION 'C'

- (c) Other equivalent qualifications acceptable to the Board.

PLUS ALL OPTIONS MUST

- (d) Complete the ASTTBC Professional Practice and Ethics Exam.

**5. Who evaluates my credentials?**

All applicants are evaluated by the Board of Examiners of the Applied Science Technologists and Technicians of BC (ASTTBC), appointed by ASTTBC Council. The Board assesses academic and experience qualifications and approves certification. The Board comprises representatives from industry, educational institutions and other professional associations. Board reviewers make comprehensive assessments of your qualifications and then present a recommendation to the Board of Examiners for approval.

**6. Who can I use as references?**

References should be persons working in industry who can verify your current and/or past experiences in the field in industrial and commercial detailing. We prefer to see registered professionals and your current supervisor listed as references. One reference should, if possible, be from a registered professional outside your place of employment. References should be individuals that you have worked for, or with in some technical capacity. Please DO NOT include personal references.

Self-employed applicants should forward confirmation of such experience in the form of letters from clients, firms, organizations or persons with whom you have done business and who can confirm the whole or portions of the period of self-employment.

Registered professionals are individuals such as:

|                                     |                                 |
|-------------------------------------|---------------------------------|
| Applied Science Technologist (AScT) | Registered Architect (MAIBC)    |
| Certified Technician (CTech)        | Registered Steel Detailer (RSD) |
| Professional Engineer (PEng)        | Certified Steel Detailer (CSD)  |

**7. How are my academic credentials assessed?**

It is important that you provide documentation of all formal education and training. Include formal post-secondary education such as graduation from Vancouver Community College, British Columbia Institute of Technology, college or university and also document any workshops, seminars and other forms of training.

Enclose a copy of the diploma, certificate and transcript of marks where this is available. Please note that the Board may also require a detailed syllabus or course outline so it can make a comprehensive evaluation of the training received. Certified English translations must accompany foreign documents.

**8. How should I describe my experience?**

The Board requires evidence of a minimum of two (2) years relevant progressive, cumulative experience, verified by references. Do not submit a résumé as a means of satisfying this requirement. When describing your experience, commence each employment period with the following:

- \* The month and year in which you both commenced and ended that period of experience.

- \* The name of your employer or the firm for whom you worked during that period, the firm's address, phone and contact name.
- \* Your position title and the position you report(ed) to, if applicable.
- \* Briefly describe the nature of your employer's/company's business.
- \* List and describe in detail the duties and responsibilities of your position. Include WHAT you do (did), HOW you do (did) it, and WHY you do (did) it.
- \* Supply a company job description if available.

Work experience should be described in detail. Experience prior to the last 10 years may be given more briefly, but should still be noted in the format suggested above. Include all periods of non-employment.

**9. Is experience considered in lieu of academic credentials?**

The Board will grant experiential learning credit towards certification. The Board may also grant 'special consideration' for certain applicants identified as having extensive work experience but lacking normal academic standards required for certification.

**10. How long does it take to process my application?**

After all requirements have been met you will submit an Application for Certification. Be sure to provide all applicable information requested. An incomplete application will delay the process. It is your responsibility to provide all requested information. Be certain to advise your References so that they are prepared and will respond quickly to our request for comments. NOTE that a special form will be sent directly to each Reference so you need not ask them for a letter of reference. You will receive a Professional Practice and Ethics Exam and must achieve 70% before the Board will consider the application. It may take up to six months to complete the application process and advise you of the Board's decision.

**11. What happens when I become certified?**

After the Board approves your certification you will receive a letter outlining the specifics of certification, certificate of registration, and other relevant information. As a Certified Detailer, you also become a member of the Steel Detailers Institute of British Columbia (SDIBC), an advocacy body for Steel Detailers in BC.

**12. What if my application for certification is not successful?**

The Board will provide you with reasons for their decision and recommendations for career development. Your membership in ASTTBC, if applicable, remains in place.

**13. May I appeal a decision of the Board?**

If you are not satisfied with the decision of the Board you may appeal the decision within 60 days of the original decision and the Board will appoint a reviewer(s) to reconsider your application.



**14. For what period of time is my certification valid?**

Certification is based on the understanding that a Detailer continues to practice in the field and is able to competently perform works at the level of certification granted.

Certification is renewed annually for members in good standing upon payment of an annual renewal fee unless circumstances warrant a further review by the Board.

**15. What is covered by the application fee?**

The non-refundable application fee that you submit with your application pays for a full and comprehensive review of your academic and experience qualifications. The Annual fee is pro-rated the 1<sup>st</sup> year for all applicants accepted into membership. You will then be invoiced in April of each year for the next 12 month period (June 1 – May 31).

**16. Any other questions?**

If you have any other questions regarding the application process, please call ASTTBC Registrations Department at 604-585-2788.