



QUALIFIED. REGISTERED. ACCOUNTABLE.

Fire Protection Certification Board Policy

**Approved by ASTTBC Council
January 28, 2016**

PREFACE

This policy was approved by the ASTTBC Council on January 28, 2016 and is issued to the Fire Protection Certification Board (FPCB) for setting certification standards, processing applications for certification, registration of Registered Fire Protection Technicians (RFPT) and the provision of recommendations on the practice of RFPTs to Council.

This revision of the FPCB policy supersedes all previous revisions approved by ASTTBC Council.

Chronology of Policy Revisions

First approved by Council September 14, 1995
Amended June 1997
Amended February 2001
Amended March 2002
Amended March 2003
Amended January 2004
Amended January 2005
Amended February 2006
Amended February 2007
Amended November 2007
Amended February 2009
Amended January 2010
Amended February 2011
Amended September 2011
Amended January 2013
Substantial Revision January 2016

DISCLAIMER

ASTTBC Directors, staff and the duly appointed members of the Fire Protection Certification Board (FPCB) are responsible for administering the policy and procedures.

Granting of ASTTBC certification to an individual or for the accreditation of a training program infers that the individual or program has satisfied the requirements and minimum standards described in this policy.

ASTTBC does not accept liability for any errors or omissions that may arise as a result of the services or work performed by an individual certified by ASTTBC or any ASTTBC accredited training program or provider.

ASTTBC does not accept liability for the consequences of any actions taken by members.

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1.0 OBJECTIVES AND COMPOSITION OF THE CERTIFICATION BOARD

1.1 Objectives

Established by the ASTTBC Council in accordance with the ASTT Act and Regulations, the primary objective of the Fire Protection Certification Board (FPCB) is to protect the public by setting competency-based standards to certify fire protection technicians and establish the standards of practice for the work done by Registered Fire Protection Technicians (RFPT).

1.2 Composition of the Board

1.2.1 The FPCB shall consist of 12 people appointed annually by Council. The people selected will be recruited from among the following categories and shall have experience commensurate with their appointment:

- RFPTs certified in various endorsements (3)
- Owners / Managers of Fire Protection firms (3)
- Education providers (2)
- Fire Service Authorities having Jurisdiction (AHJ) (2)
- Public Representatives (2)

1.2.2 The Board Members shall be recruited and appointed in accordance with the ASTTBC Guidelines on the Terms of Office for Board Members.

1.2.3 The Public Representatives shall be selected from representative groups such as the building owner's association and industry or manufacturer representatives.

1.2.4 The Registrar or designate shall act as Secretary to the FPCB and is responsible for the proper and appropriate application of the FPCB policy and procedures.

1.3 Responsibilities

1.3.1 Subject to the approval of the ASTTBC Council and in consultation with stakeholder organizations, the FPCB shall establish and implement policies and procedures relating to:

- a) Certification standards;
- b) Examinations;
- c) Standards for stamps, tags, reports and other areas of practice

1.3.2 The FPCB shall consider applications for certification and registration of fire protection technicians and may:

- a) Approve applicants for registration;
- b) Refuse applicants the registration;
- c) Defer the approval of registration.

1.3.3 The FPCB may require an applicant for certification:

- a) To pass one or more examinations;
- b) To provide evidence of having the competencies specified in the FPCB policy.
- c) To substantiate their application for certification in any other reasonable manner as requested by the FPCB.

1.3.4 The FPCB shall have the power to appoint File Reviewers to evaluate applications for certification based on the standards and criteria established by the FPCB.

1.3.5 The FPCB is responsible for the quality, consistency and timeliness of evaluations and recommendations made by FPCB File Reviewers.

1.3.6 The FPCB shall send written notice to the applicant advising of the FPCB decision. The reasons for the decision shall be included in the written notice to the applicant.

1.3.7 The FPCB shall regularly review its policies and methods and recommend changes to ASTTBC Council.

1.4 Meetings and Quorum

1.4.1 The FPCB shall meet at such times and at such places as the Chair deems necessary.

1.4.2 Six members of the FPCB shall constitute a quorum.

1.4.3 Participating in meetings by teleconference or other means of communication has equal status to being onsite in the meeting room.

1.4.4 Decisions of the FPCB shall require a simple majority. In the case of a tied vote, the Chair has the right to cast the deciding vote.

1.4.5 The FPCB may request File Reviewers to attend a Board meeting. File Reviewers attending a Board meeting do not have voting rights.

1.4.6 ASTTBC full-time or part-time staff do not have voting rights.

1.4.7 Members of the FPCB are required to advise ASTTBC Registration Staff if unable to attend a meeting. ASTTBC staff will inform the Chair.

1.4.8 The Secretary of the FPCB will record the name and time of departure if a member leaves a meeting prior to adjournment. The Board shall make no decisions if the absence of a FPCB member results in loss of quorum.

1.4.9 The Chair may invite guests to attend for specific agenda items. Guests do not have voting rights.

1.5 Expenses

1.5.1 Reimbursement of travel expenses incurred by FPCB members and authorized File Reviewers on ASTTBC business shall be based on the ASTTBC expense policy.

2.0 DESCRIPTION OF FIRE PROTECTION AND LIFE SAFETY SERVICES

2.1 General Description

2.1.1 Fire protection and life safety services refer to the inspection and testing of fire protection equipment and related systems such as fire alarms, fire pumps, emergency lighting, electrical generators, water-based fire protection, portable fire extinguishers, special suppression systems, commercial kitchen duct cleaning, and smoke control systems.

2.1.2 Fire protection and life safety services are required as specified in the BC and the National Fire Codes, BC and National Building Codes, applicable local government Bylaws using Canadian and international standards as they apply in BC.

2.2 Specific Endorsements

2.2.1 An individual may apply for endorsement in the following fire protection and life safety specialty endorsements:

1. Portable Fire Extinguishers (EX)
2. Unit Emergency Lighting (EM)
3. Fire Alarm Systems (AL)
4. Water-Based Fire Protection Systems (WA)
5. Commercial Kitchen Exhaust Cleaning (CO)
6. Special Fire Suppression Systems - Pre-Engineered (SP-P)
7. Special Fire Suppression Systems - Custom Engineered (SP-C)
8. Stationary Fire Pumps (FP)
9. Smoke Control Systems (SM)
10. Generator Systems (GS)

2.3 Registration Categories

2.3.1 Any individual seeking certification as an RFPT shall initiate the application process by registering online at www.asttbc.org to develop a comprehensive e-portfolio describing general and technical competencies and work experience.

2.3.2 Individuals that meet the general requirements specified in 3.1 shall work under the supervision of a RFPT certified in the specialty endorsement the applicant is seeking. In situations where no RFPT is available to supervise the work experience alternate arrangements may be made subject to the approval of the FPCB. The supervised work experience requirements described in section 4.0 and in Appendix 1 apply. An applicant shall comply with ASTTBC Code of Ethics and the RFPT Certification Board policy.

2.3.3 A Registered Fire Protection Technician (RFPT) is an applicant that has been certified by the FPCB in one or more of the specialty endorsements and continues to be a registered ASTTBC member in good standing.

2.3.4 A retired RFPT is defined in the ASTTBC policy on retired members.

3.0 CERTIFICATION CRITERIA

3.1 Basic Requirements

3.1.1 Canadian or Provincial Government issued photo identification as proof of Canadian citizenship, permanent residency or a visa to live and work in Canada.

3.1.2 Secondary School or equivalent including English language competency to a minimum of level 7 on the Canadian Language Benchmarks test of English speaking, writing, reading and listening. Results of an equivalent standard assessment of English competency may be considered acceptable by the FPCB.

3.1.3 Applicants with previous or current criminal record for which no pardon has been issued must write a confidential letter to the Registrar explaining past or outstanding criminal offences. ASTTBC reserves the right to request an applicant to provide, at the applicant's cost, a criminal records check. An applicant refusing to submit a criminal record check shall explain in writing to the Registrar the reasons for refusal. The letter explaining the reason for refusing to provide a criminal record check shall be submitted to the Practice Review Board (PRB) for their consideration and recommendation.

3.1.4 Provide written consent to receive electronic or paper-based communications from ASTTBC.

3.2 General Requirements

3.2.1 Applicants shall successfully complete the education, training, and supervised work experience as shown in Appendix 1.

3.2.2 Submit official transcripts or original certificates for post-secondary education and training relevant to RFPT certification.

3.2.3 Successfully complete the online Professional Practice and Ethics (PP&E) online training and examinations.

3.2.4 Applicants are required to successfully complete the certification requirements for one or more endorsements within 12 months of initiating their e-portfolio.

3.2.5 The Registrar is required to notify applicants of the pending termination of their application including forfeiture of the registration and application fees.

3.2.6 Applicants shall submit payments to ASTTBC for the non-refundable registration and application fees. Applicants are responsible for costs such as photographs, transcripts, official translation of documents, and other expenses that may be incurred to prepare and submit applications.

3.3 Challenge Exams

3.3.1 Applicants may request or may be requested by the FPCB to take a challenge exam to confirm if an Applicant has achieved the education and training requirements for certification as an RFPT.

3.3.2 Challenge exams shall be invigilated or proctored and held at an ASTTBC approved testing center.

3.3.3 Applicants who do not achieve the 80% passing mark on a challenge exam may rewrite the exam subject to the following conditions.

In all cases, the Applicant must:

- a) Have achieved a mark of at least 70% on the previous attempt of the exam.
- b) Achieve a mark of at least 80% on the rewrite of the exam.
- c) Advise the Registrar of what action has taken to improve his knowledge.
- d) Wait a minimum of three months before writing the exam.
- e) Explain any extenuating circumstances such as but not limited to illness or injury.

3.3.4 Applicants may write a challenge exam for the same endorsement a maximum of 3 times. Failure to pass the exam on the third attempt shall require the Applicant to seek further training, mentoring or field training as per the ASTTBC policy on Mentoring, Field Training and Field Assessment.

3.3.5 Fees for writing or re-writing a challenge exam apply.

4.0 SUPERVISED WORK EXPERIENCE

4.1 Eligibility to Begin Supervised Work

4.1.1 An Applicant that satisfies the basic requirements for certification as specified in section 3.1 and has successfully completed or is enrolled in education or training in preparation for certification in one or more of the specialty endorsements is eligible to begin supervised work experience.

4.1.2 With the exception of 4.2.1 below, supervised experience shall be considered as work done by an Applicant under the direct supervision of an RFPT in good standing certified in the endorsement(s) in which the Applicant is seeking certification.

4.2 Responsibilities of the Supervisor

4.2.1 Under special circumstances, such as when a municipality first approves a fire protection by-law, or where no RFPT certified in an endorsement selected by the Applicant is available to supervise, the FPCB may accept as a Supervisor persons considered by the Authority Having Jurisdiction¹ as being qualified and experienced in providing fire protection service.

4.2.2 A maximum of two Applicants shall be supervised by one RFPT or equivalent at the same time. The supervisor must be present with the applicant(s) on the premises or location where the fire protection services are being provided.

4.2.3 The Supervisor is responsible for:

- a) Providing the Applicant with opportunities to work on fire protection equipment and systems to develop the Applicant's practical skills and competencies.
- b) The safety of the Applicant and the proper completion of work done on fire protection equipment or systems.
- c) The quality and thoroughness of all work done by the Applicant.

¹ AHJ includes a Local Area Fire Chief (LAFC), Fire Chief, Chief Building Inspector, Federal Fire Commissioner's Representative, and Office of the Commissioner or Corporate Fire Marshal.

- d) Stamping and signing tags and reports and shall thus be accountable for the quality of any work done by the Applicant(s) being supervised.
- e) The quality and thoroughness of reports and tags on equipment or systems the Applicant has inspected, tested or maintained.
- f) Stamping and signing tags, inspection tests and reports as specified in the ASTTBC Standards for Use of Tags and Reporting.
- g) Verifying work experience recorded by the Applicant in the work experience logbook or e-portfolio (see Appendix 3) to attest to the accuracy of the information and quality of the work completed by the Applicant.

4.3 Cancellation of Certification

4.3.1 The Practice Review Board (PRB) shall initiate a process to cancel RFPT certification and registration if the certification was made in error, under false pretenses or if the RFPT is subject to censure conditions due to a breach in the ASTTBC Code of Ethics and Practice Guidelines.

4.4 Practice Assessment Review (PAR)

4.4.1 The ASTTBC policy on PAR applies to RFPT members.

5.0 REFEREES AND REFERENCES

5.1 Eligible Referees

5.1.1 Applicants shall provide the name, e-mail and other contact information of persons in a position to provide a personal assessment of the applicant's technical abilities, judgment, work accuracy, attitude, personal characteristics, and general professional outlook.

5.1.2 Applicants shall include their immediate supervisor or manager as a referee. A self-employed applicant may provide references from alternate referees acceptable to the FPCB.

5.1.3 If an applicant is working in an environment where there are no professionals to provide references, the FPCB may accept alternate referees.

5.2 Required Contact Information

5.2.1 The Applicant shall submit the names and contact information for 3 eligible referees as described in 5.1.

5.2.2 The Applicant authorizes ASTTBC staff and / or FPCB members or authorized file reviewer to contact referees.

5.2.3 Any information submitted to ASTTBC from the referees shall be confidential except as required by law or for administrative purposes.

6.0 STANDARDS OF PRACTICE FOR RFPT STAMP

6.1 Right to be Issued A Stamp

6.1.1 Pursuant to the ASTT Act, a Registered Fire Protection Technician (RFPT) will be issued a stamp. The stamp may only be affixed to documents prepared by the RFPT or an applicant under their direct supervision.

6.1.2 The endorsement(s) in which the RFPT has been certified and registered shall be shown on the stamp. Stamps are not transferable and are not to be used by anyone other than the RFPT to whom it was issued.

6.1.3 Stamps remain the property of the ASTTBC. Individuals who cease to be registered must immediately return the stamp to the ASTTBC.

6.1.4 Instructions for use of RFPT Tags and Stamps are further described in Appendix 4.

7.0 APPEAL PROCESS

7.1 Right to Appeal FPCB Decision

7.1.1 Within 30 days of notification of the decision of the FPCB, an applicant may submit a written appeal to the Registrar.

7.1.2 The written appeal shall describe the reasons why the applicant is appealing the FPCB decision. The appeal may contain additional documentation or supporting evidence.

7.1.3 The Registrar shall inform the FPCB of the appeal and initiate a second review of the application. The FPCB may agree or disagree with the applicant and revise the original decision. The reasons for changing the original decision shall be documented and the Applicant shall be informed of the results of the appeal.

7.1.4 If an applicant wishes to contest the appeal decision a written request for a second appeal may be submitted to the Registrar within 30 days from notification of the results of the first appeal.

7.1.5 The Registrar shall inform Council of the written request for appeal including the reasons for FPCB decisions on the application for certification and the first-stage appeal. Council may decide to deny the appeal or, alternatively, to hear the appeal at a time selected by Council. In either case, the applicant shall be advised by the Registrar of Council's decision.

7.1.6 Any member of Council who participated in any way in the decisions of the FPCB that gave rise to the appeal shall not participate in the appeal before Council.

7.1.7 Upon receiving written notice of an appeal Council shall:

- a) Refer the matter to an Appeals Committee to be convened and conducted at the discretion of the Registrar.
- b) Receive further evidence in any manner it deems fits from and of the parties involved in the decision being appealed.
- c) Quash, vary or confirm the decision of the FPCB or substitute or make a decision of its own.

8.0 CANCELLATION AND REINSTATEMENT OF REGISTRATION

8.1 Cancellation of Registration

8.2.1 Registration Staff shall advise the FPCB of the names and dates of cancellation of RFPTs.

8.2.2 Staff shall remove the name and certification endorsements on the Registration list posted on the www.ASTTBC.org / RFPT website.

8.2 Reinstatement of Registration

8.2.1 A former RFPT requesting reinstatement shall submit the following:

- a) An application for reinstatement;
- b) An up-dated resume that includes details of professional development and work history since the original registration was granted;
- c) Contact information for 3 technical referees.

8.2.2 Any application for reinstatement received three years or more from the date of cancellation of registration shall require the applicant to successfully complete the Fire Protection Challenge examination(s) for the requested endorsement(s).

8.2.3 A reinstatement fee is applicable as per Council-approved schedule of fees.

8.2.4 Upon reinstatement the RFPT shall pay the pro-rated dues for the current fiscal year.

8.2.5 With reinstatement there is no requirement to pay dues for the time the applicant was not registered. The Registrar may waive or vary any or all of the requirements stipulated in 8.2.

8.2.6 Reinstated members shall retain the previously assigned RFPT member number.

9.0 STORAGE OF FILES

The Registrar shall maintain the complete file of all Registered Fire Protection Technicians who were struck, resigned or deceased.

Seven years following cancellation of membership, resignation or death the Registrar shall remove and destroy all information from the file except the following:

- a) Original application form
- b) Board Reviewers' Examiner Reports
- c) Registrar's letters of acceptance
- d) Registrar's letters with respect to cancellation of registration
- e) Any other significant correspondence.

10.0 FREEDOM OF INFORMATION AND PROTECTION OF PRIVACY

Applicant's files are treated as confidential documents insofar as is practical. Access to information in the file is privileged to ASTTBC Registration Staff, the Board and designated File Reviewers, or others authorized by the Registrar. In exceptional circumstances the file may be disclosed, on a confidential basis, to external audit teams.

ASTTBC Council authorizes the release of files for review by the applicant during working hours. If the Registrar has cause to refuse, the matter shall be referred to Council.

APPENDICIES

Appendix 1: Education, Training and Work Experience Requirements

	Education / Training	Work Experience	Competencies / Indicators
1.	Portable Fire Extinguishers (EX)		
	<ul style="list-style-type: none"> • BCIT- OCHS 1410, or • Equivalent course, or • 80% on challenge exam 	<ul style="list-style-type: none"> • A minimum of 3-months work experience that includes • Supervised testing of 200 fire extinguishers of various types including CO₂, stored pressure, cartridge, dry chemical and others. 	<ul style="list-style-type: none"> • Appendix 2 Competencies 1.0 to 4.0 • Appendix 2 Competency 5.1
2.	Unit Emergency Lighting (EM)		
	<ul style="list-style-type: none"> • Electrical Fundamentals² and • BCIT- Fire 2077, or • Equivalent course, or • 80% on challenge exam 	<ul style="list-style-type: none"> • A minimum of 3-months work experience that includes: • Supervised testing of 100 various types of emergency lighting units (a minimum of 3 types and voltages). 	<ul style="list-style-type: none"> • Appendix 2 Competencies 1.0 to 4.0 • Appendix 2 Competencies 5.8, 5.9
3.	Fire Alarm Systems (AL)		
	<ul style="list-style-type: none"> • Electrical Fundamentals and • BCIT- Fire 2084, or • Equivalent course, or • 80% on challenge exam 	<ul style="list-style-type: none"> • A minimum of 1-year work experience that includes • Supervised testing of 25 fire alarm systems. 	<ul style="list-style-type: none"> • Appendix 2 Competencies 1.0 to 4.0 • Appendix 2 Competencies 5.2 to 5.4
4.	Water-Based Fire Protection Systems (WA)		
	<ul style="list-style-type: none"> • BCIT- Fire 2080, or • Equivalent course, or • 80% on challenge exam 	<ul style="list-style-type: none"> • A minimum of 1-year work experience that includes • Supervised inspection and testing of a minimum of 40 water-based fire protection systems of various types such as wet, dry, deluge, and standpipe. 	<ul style="list-style-type: none"> • Appendix 2 Competencies 1.0 to 4.0 • Appendix 2 Competencies 5.5 to 5.7
5.	Commercial Kitchen Exhaust Cleaning (CO)		
	<ul style="list-style-type: none"> • Philip Ackland Course, or • 80% on challenge exam 	<ul style="list-style-type: none"> • A minimum of 3-months work experience that includes • Supervised cleaning and inspection of a minimum of 25 commercial kitchen exhaust systems. 	<ul style="list-style-type: none"> • Appendix 2 Competencies 1.0 to 4.0 • Appendix 2 Competency 5.10
6.	Special Fire Suppression Systems - Pre-Engineered (SP-P)		

² Fundamental electrical and electronics competencies are specified in A and B at the end of this table.

	Education / Training	Work Experience	Competencies / Indicators
	<ul style="list-style-type: none"> • BCIT – Fire 2088, or • Equivalent course, or • 80% on challenge exam 	<ul style="list-style-type: none"> • A minimum of 2-years work experience that includes • Supervised inspection and testing of a minimum of 40 special fire suppression systems. 	<ul style="list-style-type: none"> • Appendix 2 Competencies 1.0 to 4.0 • Appendix 2 Additional Competencies to be determined by the Certification Board.
7.	Special Fire Suppression Systems - Custom Engineered (SP-C)		
	<ul style="list-style-type: none"> • BCIT – Fire 2088, or • Equivalent course, or • 80% on challenge exam 	<ul style="list-style-type: none"> • A minimum of 2-years work experience that includes • Supervised inspection and testing of a minimum of 40 special fire suppression systems of various types. 	<ul style="list-style-type: none"> • Appendix 2 Competencies 1.0 to 4.0 • Appendix 2 Additional Competencies to be determined by the Certification Board.
8.	Stationary Fire Pumps (FP)		
	<ul style="list-style-type: none"> • 80% on challenge exam 	<ul style="list-style-type: none"> • A minimum of 1 year of work experience that includes: • Supervised inspection and testing of a minimum of 40 water-based fire protection systems that include fire pumps. 	<ul style="list-style-type: none"> • Appendix 2 Competencies 1.0 to 4.0 • Appendix 2 Appendix 2 Additional Competencies to be determined by the Certification Board.
9.	Smoke Control Systems (SM)		
	RFPT (AL) certification and <ul style="list-style-type: none"> • BCIT- Fire 2086, or • Equivalent course, or • 80% on challenge exam 	<ul style="list-style-type: none"> • A minimum of 2 years work experience that includes: • Supervised inspection and testing of a minimum of 40 smoke control systems. 	<ul style="list-style-type: none"> • Appendix 2 Competencies 1.0 to 4.0 • Appendix 2 Competencies 5.2, 5.3, 5.4
10.	Generator Systems (GS)		
	<ul style="list-style-type: none"> • Electrical Fundamentals or • Red Seal Electrician (Industrial or Construction) • Red Seal mechanic, or • Heavy-duty mechanic, or • Automobile mechanic, and • 80% on challenge exam 	<ul style="list-style-type: none"> • A minimum of 2-years work experience that includes • Supervised inspection and testing of a minimum of 40 generator systems of various types. 	<ul style="list-style-type: none"> • Appendix 2 Competencies 1.0 to 4.0 • Appendix 2 Additional Competencies to be determined by the Certification Board.
A.	Electrical Fundamentals <ul style="list-style-type: none"> • BCIT – 1050 Electrical for Fire Protection, or • Equivalent course that includes: Basic Electrical theory - Ohm's law, Kirchoff's law, magnetism, energy generation and the dangers of higher A/C voltages. Understanding the Canadian Electrical Code with reference to the following areas: <ol style="list-style-type: none"> 1. Electrical safety 2. Conductors: sizing, insulation types, voltage ratings and other conductor characteristics, 3. Grounding of conduit systems and enclosures - Section 10, 4. Wiring methods, conduit and cable installation, 5. Protection and control of electrical circuits - overcurrent protection (fuses & breakers), 6. Disconnecting means, class 1 & 2 circuits - Section 14, and 		
B.	Electronics Fundamentals Principles of electronics applicable to life safety systems, including fire alarms and building automation systems		

	Education / Training	Work Experience	Competencies / Indicators
	<p>including analogue and digital systems and their applications.</p> <ol style="list-style-type: none"> 1. Measurement techniques to verify the operation of a circuit 2. Make and follow a troubleshooting plan 3. Isolate, verify and repair circuit faults 4. Use Basic Electronic Test Equipment 5. Use a bench power supply, multimeter, oscilloscope and function generator 6. Understand the limitations of measurement equipment 7. To read electronic schematic diagrams. 8. Understand the basic electronic theory as it applies to electron flow and current flow, impedance, inductance, capacitance and modulation. 9. Explain rectification of A/C power, the theory and operation of charging circuits, batteries, voltage regulation, and know how to test these systems. 10. Understand and identify amplifier circuits, filtering circuits, op amps, switching circuits and other electronic circuits. 11. Know the use and be able to identify diodes (all types), transistors (all types), capacitors, and resistors, as in their colour code. 12. The knowledge of basic digital and analog technology, and integrated circuits should be displayed. 		

Appendix 2: RFPT Competency Standards

Competencies		To demonstrate achievement of each competency you should be able to explain or describe how to:
1.0	Apply fundamental occupational skills	
1.1	Maintain a professional work ethic	<ul style="list-style-type: none"> • Assess, apply ASTTBC Code of Ethics and Practice Guidelines • Apply general principles of professionalism, diligence. • Advocate best practices. • Promote regulatory compliance. • Promote fire and life safety.
1.2	Employ effective business practices	<ul style="list-style-type: none"> • Determine liability risks and mitigating strategies. • Obtain written declarations from owners to confirm permission to enter property, structures and to conduct inspections. • Provide written quotes with fixed pricing. • Use written contracts. • Maintain insurance coverage. • Use effective office filing systems with backup.
1.3	Apply effective communication skills	<ul style="list-style-type: none"> • Attain verbal and written English literacy suited for a Canadian technical workplace. • Use communication skills to define expectations and agreements with clients and owner education. • Convey limitations of the inspection processes.
1.4	Apply math and science concepts	<ul style="list-style-type: none"> • Apply metric and imperial systems of measurement: <ul style="list-style-type: none"> ○ Calculate conversions. ○ Interpret specifications and regulatory requirements that are expressed in systems of measurement. • Apply basic math concepts including: <ul style="list-style-type: none"> ○ Decimal and percentage expressions. ○ Fractions. ○ Order of arithmetic operations. ○ Exponential functions. ○ Rounding and significant figures.
1.5	Differentiate systems	<ul style="list-style-type: none"> • Define terminology, nomenclature in common usage for each endorsement category. • Describe types and configurations of systems ...identify purposes and function of hardware as applicable to endorsement including: <ul style="list-style-type: none"> ○ Fire protection. ○ Fire and smoke alarms. ○ Extinguishers. ○ Emergency lighting, ○ Ductwork.
1.6	Use equipment and tools	<p>Explain purposes, demonstrate proper selection, use, and care of tools and equipment applicable to the various endorsements:</p> <ul style="list-style-type: none"> • Hand tools. • Ladders. • Canned smoke.

Competencies	To demonstrate achievement of each competency you should be able to explain or describe how to:
	<ul style="list-style-type: none"> • Heat gun. • Electrical testing equipment: <ul style="list-style-type: none"> ○ Multimeter. ○ Voltage tick meter. ○ Battery load tester. • Pressure differential manometer (for smoke control). • Smoke detector sensitivity testers.
2.0 Work Safely	
2.1 Apply applicable OH&S regulations	<ul style="list-style-type: none"> • Outline and apply portions of the following OH&S regulations that have applicability to the personal safety of the RFPT: <ul style="list-style-type: none"> ○ Part 3 Rights and Responsibilities ○ Part 4 General Conditions ○ Part 7 Noise, Vibration and Temperature ○ Part 8 Personal Protective Clothing and Equipment ○ Part 9 Confined Spaces ○ Part 10 De-energize and lockout ○ Part 11 Fall protection ○ Part 13 Ladders, Scaffolds and Temporary Work Platforms ○ Part 19 Electrical Safety
2.2 Evaluate risks associated with worksites	<ul style="list-style-type: none"> • Identify risks to the personal safety of the RFPT and adopt strategies to eliminate or reduce those risks, including the following: <ul style="list-style-type: none"> ○ Electrical safety. ○ Gas safety. ○ Confined space. ○ Hazardous materials. ○ Driving, traffic risks, security of loads. ○ Working in vicinity of mobile equipment, manufacturing equipment, material moving equipment, conveyors, other industrial hazards. ○ Transport of dangerous goods. • Identify the purposes, proper use and adjustment, inspection and maintenance procedures for the types of PPE commonly used in the specific industry of the RFPT, including: <ul style="list-style-type: none"> ○ High visibility apparel. ○ Safety headgear. ○ Eye protection. ○ Hand protection/gloves. ○ Respiratory protection.
3.0 Test and inspect fire protection systems	
3.1 Develop a work plan	<ul style="list-style-type: none"> • Gather background information including previous inspection reports (incl. fire safety plan if applicable). • Identify types of systems, scope of work. • Select and use appropriate equipment and tools. • Consult, confirm plan with property management. • Identify impact of circumventing systems (if applicable), contact authority having jurisdiction (as applicable to task).

Competencies		To demonstrate achievement of each competency you should be able to explain or describe how to:
3.2	Analyse regulatory compliance	<ul style="list-style-type: none"> Determine access to system components, Identify impediments to accessing components and mitigation strategies. Access, outline, apply relevant portions of the following: <ul style="list-style-type: none"> Occupational Health and Safety Regulation. BC Building Code. Fire Codes (national, provincial and local codes, standards and bylaws). Including ULC/CAN S 536. Electrical code including section 32, 10.
4.0 Create documentation		
4.1	Produce field notes	<ul style="list-style-type: none"> Include date, time, location, weather, and persons in attendance. Ensure sufficient clarity to allow another competent person to understand. Include adequate detail to support conclusions and reports.
4.2	Prepare tags	<ul style="list-style-type: none"> Complete and affix tags as per regulatory requirements and standard practice.
4.3	Prepare a photographic record	<ul style="list-style-type: none"> Select number of photos and orientation to record the following: <ul style="list-style-type: none"> Convey understanding of the site/workplace conditions. Support conclusions and recommendations. Provide evidence of diligent scope of work.
4.4	Create written report	<ul style="list-style-type: none"> Select format and scope of reports depending on regulatory reporting requirements and workplace policies/expectations (often checklist forms). Include sufficient information to convey findings and to support recommendations and conclusions. Include evidence such as photographs, supporting documents.

Endorsement-Specific Competencies

In addition to the general common core competencies applicable to all categories or endorsements, the applicant for must achieve competency in one or more of the following endorsements.

Competencies		To demonstrate achievement of each competency you should be able to explain or describe how to:
5.0 Endorsement-Specific Competencies		
Portable Fire Extinguishers (EX)		
5.1	Confirm systems are operating as intended	Test, inspect and recharge portable fire extinguishers.
Fire Alarm Systems (AL)		
5.2	Apply principles of electricity	
5.3	Interface with addressable systems	Navigate panel menus. Access data logs. Manipulate controls.
5.4	Confirm systems are operating as intended	Alarm systems. Pull station testing. Heat detectors. Smoke detectors.

Water-based Fire Protection Systems (WA)

- 5.5 Inspect system components Identify and set control valves to be normally open or closed
Identify control valves required to be normally open are supervised/secure
Inspect system components for accessibility, damage, leaks, corrosion, impairment, proper position and orientation, normal and seismic support and protection from damage.
Inspect data placards and signs.
Check to determine if there is adequate heat to protect freezing of water-filled pipes / systems.
- 5.6 Test system components Operate water control and test valves
Conduct drain test and interpret results
Conduct water-flow alarm tests
Perform manufacturer's specified test procedures for deluge and pre-action sprinkler systems as per manufacturer's specifications
- 5.7 Confirm systems are operationally ready Confirm that water supply valves are fully open
Check that alarm lines are open
Verify that system pressures are normal

Unit Emergency Lighting (EL)

- 5.8 Apply principles of electricity Apply Ohm's law to determine voltage, amperage, resistance
Identify and explain the basic functions of electronic components such as capacitors, resistors, and diodes.
Describe the difference between alternating current and direct current.
Interpret wiring schematics.
- 5.9 Confirm systems are operating as intended Check battery condition and adequacy of power.
Verify connection to 110 volt power source.
Test operating condition of lights and fuses.

Commercial Kitchen Exhaust Cleaning (CO)

- 5.10 Confirm systems are operating as intended Check cleanliness of exhaust ducts, filters, and grease traps.
Test cables and fusible links.
Verify operating condition of fire retardant cylinder.

Special Fire suppression Systems Pre-Engineered (SP-P)

Special Fire suppression Systems Custom Engineered (SP-C)

Smoke Control Systems (SM)

- Apply principles of electricity
- Interface with addressable systems
- Confirm systems are operating as intended
- Navigate panel menus.
- Access data logs.
- Manipulate controls.
- Alarm systems.
- Pull station testing.
- Heat detectors.
- Smoke detectors.

Appendix 3: Work Experience Log Book Examples

1) Work experience for Portable Fire Extinguishers (EX) (3 months and 200 Extinguishers of various types)

No.	YYYY-MM	Type	Size	No. of EX	Supervisor
Example:	2016-01	Dry Chem.	5 lb.	8	FP 9999
1.					
2.					
3.					

2) Work experience for Unit Emergency Lighting (EM) (3 months and 100 units of various types)

No.	YYYY-MM	Address	Building Type	No. of EM	Supervisor
Example:	2016-01	123 Main St., Surrey	Residential (low-rise)	8	FP 9999
1.					
2.					
3.					

3) Work experience for Fire Alarm Systems (AL) (1 year and 25 systems of various types)

No.	YYYY-MM	Address	Building Type	Make	Supervisor
Example:	2016-01	123 Main St., Langley	Residential (high-rise)	Edwards	FP 9999
1.					
2.					
3.					

4) Work experience for Water-based Fire Protection Systems (WA) (1 year and 40 systems)

No.	YYYY-MM	Address	Building Type	System Type	Supervisor
Example:	2016-01	123 Main St., Coquitlam	Commercial (high-rise)	Deluge	FP 9999
1.					
2.					
3.					

5) Work experience for Commercial Kitchen Exhaust Cleaning (CO) (3 months and 25 systems)

No.	YYYY-MM	Address	Building Type	System Type	Supervisor
Example:	2016-01	123 Main St., Kelowna	Restaurant	Wall Canopy Hood	FP 9999
1.					
2.					
3.					

6) Work experience for Special Fire Suppression Systems – Pre-Engineered (SP-P) (2 years and 40 pre-engineered systems)

No.	YYYY-MM	Address	Building type	System Type	Supervisor
Example:	2016-01	123 Main St., Abbotsford	Commercial (low-rise)	Dry chemical	FP 9999
1.					
2.					
3.					

7) Work experience for Special Fire Suppression Systems – Custom Engineered (SP-C) (2 years and 40 custom engineered systems)

No.	YYYY-MM	Address	Building type	System Type	Supervisor
Example:	2016-01	123 Main St., Hope	Industrial	Halogenated	FP 9999
1.					
2.					
3.					

8) Work experience for Stationary Fire Pumps (FP) (1 year and 40 systems)

No.	YYYY-MM	Address	Building Type	Type	Capacity (GPM)	Supervisor
Example:	2016-01	123 Main St., Trail	Residential (high-rise)	Diesel	500 to 1,000	FP 9999
1.						
2.						
3.						

9) Work experience for Smoke Control Systems (SM) (2 years and 40 systems)

No.	YYYY-MM	Address	Building Type	Smoke control measure	Supervisor
Example:	2016-01	123 Main St., Burnaby	Hotel (high-rise)	Measure E	FP 9999
1.					
2.					
3.					


10) Work experience for Generator Systems (GS) (2 years and 40 systems)

No.	YYYY-MM	Address	Building Type	System Type	Supervisor
Example:	2016-01	123 Main St., Mission	Hospital / Care facility	Cummins C10 D6	FP 9999
1.					
2.					
3.					

Appendix 4: Instructions for Tags

INSTRUCTIONS FOR TAG USE:

The RFPT will conduct the required inspections and/or tests and immediately record on a new tag the condition of the fire protection system or equipment compared to the intended functionality as established by the manufacturer and / or applicable by-laws, codes and standards. The RFPT will punch or ✓ the front of the tag to indicate whether the system or equipment has no deficiencies, and is considered PASS or if deficiencies are found and is considered FAIL.

 (TAG FRONT SIDE) (FIRE PROTECTION COMPANY INFORMATION HERE)			
System / Equipment Inspected / Tested	PASS	FAIL	
Portable Fire Extinguisher			
Emergency Lighting System			
Fire Alarm System			
Sprinkler / Standpipe System			
Kitchen Exhaust System			
Fire Pump			
Generator System			
Smoke Control System			
Pre-engineered Suppression System			
Custom-engineered Suppression System			
Technician's Stamp	Serial #		
	Next service due on or before		
	YYYY	MM	DD
	Do not remove this tag until new tag is applied.		
The above noted fire protection system or equipment was inspected and tested in the month and year shown below. When FAIL has been punched or ✓ a report will be forwarded to the owner or manager and the Authority Having Jurisdiction. SEE LOG AND REPORT FOR ADDITIONAL INFORMATION			
J	F	M	A
M	J	J	A
S	O	N	D
2016	2017	2018	2019
2020			

PASS: When the fire protection system or equipment is determined to be in operating condition to function as intended the RFPT shall punch or ✓ the column on a new tag in the row for the appropriate system or equipment and column indicating PASS to indicate there were no deficiencies when inspected and tested.

FAIL: When the fire protection system or equipment is determined to have deficiencies the RFPT shall punch or ✓ a new tag in the row for the appropriate system or equipment and column indicating FAIL. The RFPT shall then deface the tag by placing a large, broad-width (preferably red) "X" across the front and back of the tag. The RFPT shall enter in the inspection / test log the deficiencies and the action required to return the system or equipment to a state of no deficiencies. The RFPT shall immediately notify verbally and in writing the building owner or manager and the Authority Having Jurisdiction (AHJ) that the system or equipment has deficiencies resulting in the FAIL rating.

The completed inspection log and report shall be immediately provided to the owner or manager and to the Authority Having Jurisdiction (AHJ).

Note: Minimum tag size shall be 7.5 x 15.0 cm.