ASTTBC Professional Practice Guideline – Fire Protection Technology Services for Building Projects

Guideline Subject	ASTTBC Professional Fire Protection Technology Services for Building Projects
Guideline Section	
Guideline Number	
Approving Authority	ASTTBC Board
Revision	V2.0 November 28, 2023
Publication Date	
Approved Date	September 30, 2021
Responsible Officer	Registrar
Next Policy Review Date	

Table of Contents

ASTTBC Professional Practice Guideline – Fire Protection Technology Services for Building Projects .. 1

Preamble 2

1.0 DEFINITIONS 2

2.0 PURPOSE 3

3.0 AREA OF PROFESSIONAL PRACTICE 3

4.0 FIRE PROTECTION TECHNOLOGY DESIGN SERVICES 4

5.0 CONTINUING PROFESSIONAL DEVELOPMENT(CPD) 5

6.0 PROFESSIONAL SEAL 5

7.0 PROFESSIONAL LIABILITY 5

8.0 PROFESSIONAL GOVERNANCE ACT AND ASTTBC BYLAWS 6

9.0 LIMITATIONS 6

REFERENCES 6

REVISION HISTORY 7

Preamble

Professional Practice Guideline: Fire Protection Engineering Technology Services for Building Projects aims to define the competencies and scope of practice for ASTTBC registrants. Registrants are required to comply with the Professional Governance Act, its regulations, ASTTBC Bylaws, including ASTTBC's Standards of Competence, any Guideline to Professional Practice approved by the Board, applicable Building Codes, Bylaws, and provincially exempt organizations & authorities.

Specifically, all registrants are required to understand and adhere to the following ASTTBC guidelines:

- Continuing Professional Development
- Professional Practice & Conduct, and
- Professional Seal

This guideline cannot restrict a registrant's practice when they hold both an AScT and EGBC's Professional Licensee Engineering. It shall only apply to work within the province of BC.

1.0 DEFINITIONS

Term	Definition
Registrant	a person who is granted admission, enrolment, or reinstatement in a class of registrants within a category of registration with ASTTBC.
AScT	a person who is certified and registered as an Applied Science Technologist with ASTTBC.
CTech	a person who is registered as a Certified Technician with ASTTBC.
Direct Supervision	(as defined in Bylaws of Engineers and Geoscientists BC) means the responsibility for the control and conduct of the activities, work, or decisions related to the Regulated Practice that have been delegated to a Subordinate.
Registered Professional	(as defined in the BC Building Code) means a person who is registered or licensed to practice as an architect under the Architects Act or a person who is registered or licensed to practice as a professional engineer under the Professional Governance Act. A similar definition is provided in the National Building Code and the City of Vancouver Building Bylaw.

2.0 PURPOSE

Professional Practice Guideline for *Fire Protection Engineering Technology Services for Building Projects* has been adopted to support ASTTBC registrants in understanding the service areas and taking professional responsibility within their field. The Guideline also aims to provide a definition of the scope of practice and legal limitations. While not exhaustive, the Guideline provides a context for the type of technical functions, which a registrant may be qualified to carry out. The carrying out of additional professional services is permitted under this Guideline, provided the services are consistent with the requirements of each project and this Guideline.

This Guideline recognizes that ASTTBC registrants have attained, by a combination of education, training, and experience, competencies that enable them to apply known applied science and technology principles and techniques to provide solutions to problems of varying complexity within the ASTTBC definition of scope of practice, this Guideline, and other applicable laws.

It is important to note that Letters of Assurance assigning professional responsibility and accountability for Fire Protection/Suppression services for buildings covered under the BC Building Code and the City of Vancouver Building Bylaw can only be signed and sealed by a Registered Professional as defined in the BC Building Code, the National Building Code, and the City of Vancouver Building Bylaw.

A registrant generally works within a team of professionals, which may include technologists, technicians, engineers, building officials, architects, or other technical and administrative staff. There is no restriction on who may 'manage' professional services, with the understanding that the appropriate registered professionals are involved in carrying out the work.

An ASTTBC registrant may be the team leader of a project, which is more complex than the scope of practice contemplated by this Guideline when responsibility is assumed by an appropriately qualified and registered professional.

A registrant must be able to recognize any unique characteristics, which, due to their complexity or other issues, are beyond their field of expertise and require the involvement of another qualified professional, whether a registrant of ASTTBC or another professional regulator. Consideration of such matters is especially critical when the risk to the public is increased by factors related to the type and size of the project and the degree of impact on public health, safety, and the environment.

3.0 AREA OF PROFESSIONAL PRACTICE

A registrant may provide professional services for the fire protection of buildings that is carried out within the terms of this Guideline. Published NFPA codes and standards are examples of a range of codes and standards related to fire protection design services for building projects that can be used as resources in the carrying out of such services. A registrant may carry out and take professional responsibility for their services in one or more of the technical functions listed below. Currently, if a registrant provides services within Part 3 of the BC Building Code or Vancouver Building Bylaw, they must only provide these services while under the "direct supervision' of a Professional Engineer, Licensee, or limited licensee as defined in the Professional Governance Act. This applies to renovations as well

as new building projects. Fire Protection Design Services can be categorized into two distinct sections related to Fire Protection / Suppression Systems and Fire Alarm and Detection Systems as outlined in Applicable Building Codes. An ASTTBC registrant providing services shall be limited to buildings within Part 9 of approved building codes, working within acceptable standards up to, but excluding "requirements for high rise buildings", building code alternative solutions, fire modeling, and performance-based design criteria. The normal services provided are usual to categories of buildings identified in jurisdictionally acceptable building codes. The registrant providing fire protection services may also be involved in other project-related activities such as, but not limited to:

- management of a project, or aspects of a project
- Preparation, evaluation, and adjudication of tenders
- Preparation of design development and working shop drawing.
- project field review, supervision, and contract administration.
- teaching and mentoring
- co-ordinate fire protection system tests for new and existing buildings

A registrant shall take note of practice restrictions incorporated in other professional legislation and govern themselves accordingly.

4.0 FIRE PROTECTION TECHNOLOGY DESIGN SERVICES

This Guideline recognizes the services that ASTTBC registrants have traditionally carried out in the provision of fire protection services for building projects. Under the authority of the Professional Governance Act, ASTTBC Bylaws, and this Guideline, a registrant may carry out one or more of the services itemized under section 3.0.

The application of an appropriate code or standard to one component of a service does not permit the completion of other components if there are no appropriate codes or standards in place that can be referenced. The registrant is advised to identify, in their design, the code and/or standard used in carrying out the relevant service(s). When working under the supervision of a Professional Engineer or Professional Licensee Engineering, the registrant must identify the code and/or standard so that the supervising professional can determine its applicability.

Depending on the size and complexity of the facilities being designed, the registrant may be called upon as the designer of a particular technical function as in those listed in Section 3.0 or might alternately work as a member of a team.

Following is a description of specific technical functions a registrant may carry out as part of the overall Fire Suppression/Protection System and/or Fire Alarm and Detection System design of a building. A prescriptive code or standard is required to be in place for a registrant to take responsibility for a particular technical function or an aspect of a particular technical function identified below, but not limited to:

- Design of Fire Suppression / Protection Systems by codes enforced in the province of British Columbia. These systems would include but not limited to:
  a. water-based fire protection systems
  b. special extinguishing systems
  c. special protection systems, clean agent systems, and kitchen

suppression systems
d. portable fire extinguishers

- Design of Fire Alarm and Detection Systems by codes enforced in the province of British Columbia. These systems would include but not limited to:
  a. fire alarm and voice communication systems
  b. smoke alarms and carbon monoxide detectors
  c. emergency power systems and unit equipment for emergency lighting

- Project management.

- Field reviews to determine whether constructed works comply with the prescriptive code or standard of the particular technical function carried out and the design intent.

- Review of architectural, mechanical, and electrical drawings for conformance with the fire and life safety requirements of Part 3 and/or Part 9 of the BC Building Code and the Vancouver Building Bylaw that may be in force.

- Prepare and review drawings and specifications for fire suppression/protection systems.

5.0 CONTINUING PROFESSIONAL DEVELOPMENT(CPD)

Registrants must ensure that they are continuously updating and advancing their knowledge, skills, and competence through continued education and professional development studies. Continuing education requirements include, but are not limited to, training, workshops, certifications, and other requirements to support professional development in areas of practice, ethics, and competence. It is mandatory for a practising registrant to complete CPD requirements as detailed in ASTTBC Bylaws, Part VI, Schedule E, and the Continuing Professional Development Guideline.

6.0 PROFESSIONAL SEAL

In accordance with section 84 of ASTTBC's bylaws, temporary and practising registrants in good standing are authorized to affix their professional seal, with signature and date, to all designs, reports, specifications, or other documents which may require a seal, either as required by law or ASTTBC practice guidelines. Where such work is a part of a total service or product, the registrant will qualify the application of the seal concerning which portions of the work have been undertaken without supervision.

Where a registrant has completed work under direct supervision, the registrant may affix their seal only for those aspects of the work completed by the registrant. The supervising professional will affix their professional seal noting their role as the professional providing direct supervision.

7.0 PROFESSIONAL LIABILITY

ASTTBC registrants are required to hold paramount the safety, health, and welfare of the public, the protection of the environment, and the promotion of health and safety within the

workplace. It is the responsibility of the ASTTBC registrant to ensure that adequate professional liability (E&O) insurance is in place. In accordance with section 86 of ASTTBC Bylaws, registrants must carry and maintain professional liability insurance either through the employer or a third-party organization. In keeping with section 86.1 of ASTTBC's bylaws, before agreeing to provide applied science and engineering technology services, registrants must provide written notification to their clients of the status of their professional liability insurance and confirm whether it covers the services to be provided. Registrants must also request the client to provide a written acknowledgment of receipt of the written notification.

8.0 PROFESSIONAL GOVERNANCE ACT AND ASTTBC BYLAWS

In February 2021, the *Applied Science Technologists and Technicians Act* was repealed and ASTTBC was continued as a regulatory body under the Professional Governance Act. As a regulatory body under the Professional Governance Act, ASTTBC has the duty to serve and protect the public interest concerning the conduct of its registrants exercise its powers, and discharge its responsibilities in the public interest. ASTTBC is subject to the oversight of the Office of the Superintendent of Professional Governance (OSPG), which operates under the Ministry of Attorney General.

ASTTBC's bylaws create various categories of registration, including practising and trainee, as well as requirements for maintaining registration with ASTTBC in good standing. ASTTBC is responsible for ensuring that registrants conduct themselves in a professional, competent, and ethical manner in the provision of services to the public. This includes by creating and disseminating practice guidelines, standards of competence, and a Code of Ethics to ASTTBC registrants with which registrants must comply. This practice guideline should be read in conjunction with section 85 and Schedule D of ASTTBC's bylaws.

In accordance with the Professional Governance Act and the ASTT Regulation, registrants of ASTTBC are permitted to engage in the regulated practice of applied science technology and are granted exclusive use of reserved titles. In accordance with the ASTT Regulation, registrants of ASTTBC have exclusive use of the titles of Applied Science Technologist (AScT), Applied Science Technologist Trainee, Certified Technician (CTech), Certified Technician Trainee, and Registered Technical Specialist (RTS).

9.0 LIMITATIONS

Every effort has been made to ensure the accuracy and completeness of this Guideline. Any error or omission does not relieve a registrant from making decisions and assuming professional responsibility appropriate to the circumstances.

REFERENCES

The following documents are suggested as reference material:

1. Professional Governance Act & ASTTBC Bylaws
2. BC Building Code
3. City of Vancouver Bylaws
4. APEGBC's Guidelines for *Fire Protection Engineering Services for Building Projects*
5. NFPA Codes and Standards

6. ASTTBC Continuing Professional Development Guideline
7. ASTTBC Professional Practice & Conduct Guideline
8. ASTTBC Professional Seal Guideline
9. Other ASTTBC Guides to Professional Practice in related practice areas
10. Other applicable codes and standards

REVISION HISTORY

- DRAFT #6 – May 22, 2008 (Approved in Principle by ASTTBC Council)
- November 10, 2015, Draft Revisions (Joint Board – Preliminary, for info only)
- Jan/Mar 2016 – Minor revisions and staff-initiated changes
- March 7, 2017 – Draft #10 For Review by SME Group
- March 10, 2017 – Draft #11 For Final Review by SME Group
- April 11, 2017 – Final SME Approved Draft for ASTTBC Council Approval
- April 11, 2017 – Approved by ASTTBC Council
- May 6, 2021- Revised to reflect changes under the Professional Governance Act
- August 2021- Revised upon review by SME Group, no major changes suggested.
- September 30, 2021- Approved by ASTTBC Council
- Revised November 2023, to incorporate updates to ASTTBC Guidelines and bylaws and reviewed for consistency with ATTBC EDI policy.