

**The Association of Professional Engineers of the
Province of Prince Edward Island
(Engineers PEI)**



**GUIDELINE
FOR USE OF
PROFESSIONAL SEAL**

1.0 INTRODUCTION

The Association of Professional Engineers of the Province of Prince Edward Island (Engineers PEI) Engineering Professions Act and the By-laws including the Code of Ethics establish the basic requirements for the use of the professional seal. This guideline elaborates on those requirements and is presented for use by the members and licensees of Engineers PEI. It applies to all disciplines of engineering.

2.0 DEFINITIONS

- Act* - *Engineering Profession Act (2009)*
- Authentication* - *Application of the professional seal, signature and date.*
- Certificate Authority* - *A trusted, third-party organization that issues digital certificates. The certificate authority must have a relationship with Engineers PEI to access member identities and continued professional status.*
- Digital Certification* - *Encryption technology applied to electronic documents to verify their origin and integrity.*
- Document* - *Engineering: A work product that expresses engineering work, typically as a result of an analysis or design process, e.g. engineering drawings; specifications and design requirements; instructions; design notes and calculations; reports based on engineering judgment, opinions, evaluations, certifications, condition assessments, analysis or verifications.*
- Electronic Document* - *A work product created and recorded in an electronic format, e.g. an electronic mail message, facsimile or drawing.*
- Final Document* - *A professional work product issued to another person/entity as an approved document on which they can rely as final for its intended purpose. Documents provided for review or comment are not considered final.*
- Licensed Professional Engineer* - *A person licensed by Engineers PEI (Licensee) to practice engineering in the Province of Prince Edward Island and not otherwise Engineer or eligible for registration as a member due to not meeting residency.*
- Registered Professional Engineer* - *A person holding a certificate of registration (Member) to engage in the practice of engineering in the Province of Prince Edward Island.*
- Registrant* - *A member or licensee.*
- Responsible Professional* - *A professional engineer registered as a member or licensee of Engineers PEI who prepares documents or under whose direct supervision has documents prepared.*
- Seal* - *When used as a noun, the term refers to the stamp issued by Engineers PEI. As a verb, the term “to seal” refers to the application of the professional seal, signature and date. It is synonymous with the term*

“authenticate”.

- Software* - *All information, commands, instructions, programs or procedures required to use and operate a computer system, one of its components, or any other digital data processing device. Software is independent of the medium on which it is recorded.*
- Stamp* - *Synonymous with seal. The words seal and stamp are often used interchangeably.*

3.0 SCOPE

This guideline describes the use of the Engineers PEI professional seal when authenticating engineering work products. These requirements apply equally to work products prepared by registrants for use by their in-house employers and to those prepared for external clients or authorities.

4.0 CUSTODY & CONTROL OF SEAL

Upon registration and payment of dues, the seal is issued to members or licensees by Engineers PEI. It remains the property of Engineers PEI and is to be returned upon request. Members are issued a perpetual seal at the time of initial registration. Seals are issued to licensees for the calendar year in which they are registered.

Members and licensees are to be the sole users of their seals and are to prevent the unauthorized use of their seals.

5.0 SEALING REQUIREMENTS

5.1 Validity of Seal

The words “seal” and “stamp” are interchangeable. When authenticating documents, a professional seal, full signature and date are to be applied to record and illustrate acceptance of professional responsibility for the document to which the seal is affixed. Backdating of the seal is prohibited.

All final drawings, specifications, plans, reports, and other documents pertaining to the practice of professional engineering should be sealed by the person who prepared or directly supervised the work. Conversely, documents of a personal or non-engineering nature should not be sealed. Affixing a seal to a document does not turn it into an engineering document.

5.2 Manual Seals

The ink impression of the manual seal should be clear and legible and must be signed and dated across the seal. It is preferred that the ink used for the seal, and the ink used for the signature and date, are contrasting colours. The handwritten signature is trusted as a valid mark of authentication for paper documents because its inherent uniqueness makes it difficult to reproduce.

5.3 Electronic Images of Manual Seals

For ease of repeatability and application, computer-generated seal application to electronic documents (ie. CAD drawings etc.) may be desirable. The electronic reproduction of the manual seal is permitted provided the seal image is identical in size, appearance and presentation of information as the seal issued by Engineers PEI. The signature and date must not be part of the electronic image but rather added separately by hand.

An electronic image of a seal is not secure and is vulnerable to being modified and used by others without the responsible professional's knowledge. It is recommended that an electronic seal image be inserted in a document immediately prior to plotting or printing the document hardcopy original, and that it be removed from a document immediately after plotting or printing is complete. The Engineers PEI registrant is responsible for the use, custody, and control of the electronic seal image.

5.4 Digital Seals/Signatures

It is critical to the protection of the public that the professional seal applied by an Engineers PEI registrant is reliable. Therefore, digital seals/signatures using encryption technology are required for all professional work products that are only finalized/issued in electronic form.

Digital certification involves secure encryption technology that identifies the document owner and indicates if an electronic document has been changed or altered from the original. Professional work products that are digitally authenticated must include an electronic image of the professional seal, image of the signature, and the date. However, it is the digital certificate that confirms the integrity, security and authenticity of the work product.

To meet Engineers PEI best practices the Certificate Authority used must:

- be experienced in providing this technology to members and licensees of other professional associations
- have the resources, technical support and systems in place to provide continuity of service for the foreseeable future
- have protocols consistent with Engineers PEI's authority to regulate the use of Engineers PEI engineers' stamp, by allowing Engineers PEI to revoke or suspend an Engineers PEI engineers' ability to use their stamp
- have protocols consistent with Engineers PEI's need to ensure that only an Engineers PEI engineer is granted the authority to own and use an electronically or digitally applied stamp with their personalized digital certificate
- have a platform that offers flexibility and ease of use for a wide range of purposes and applications (e.g. compatible with different file formats, ability to stamp, sign and date multiple sets of engineering documents in a single operation)
- use a Public Key Infrastructure, which is a combination of hardware, software, people, policies and procedures needed to create, manage, distribute, use, store, and revoke digital signatures
- have a Digital Certificate that is compliant with the International Telecommunications Union X509v3 standard
- maintain the digital certificate under the sole control and possession of Engineers PEI engineer
- allow digital certificate to be stored on the media of Engineers PEI engineers' choice (i.e. hard drive, memory stick)
- provide interfaces between the technology and the software used by Engineers PEI engineers so the image of the Engineers PEI Stamp with signature and date appears when printing or viewing the work product.

Engineers PEI has a formal agreement with the Certificate Authorities listed in Appendix A.

5.5 Original Documents

Only documents that are signed and dated by hand, or that have been digitally signed/certified are authenticated originals.

6.0 GENERAL REQUIREMENTS

6.1 Preliminary Documents

Generally, because there are limitations as to accuracy, preliminary documents should not be sealed. There are exceptions, however, such as when documents are issued for a specific purpose.

Preliminary documents are to be identified as “Draft” or “Preliminary”. If preliminary documents are used for regulatory approval or similar, they should also be clearly marked to the level of completeness and restricted to the particular use for which the document was released such as “For Review Only”, “For Permitting Only”, “Not for Construction” or equivalent.

6.2 Final Documents

Final correspondence, drawings, specifications, plans, reports and other engineering documents are to be sealed by the responsible professional.

6.3 Multiple Seals

The application of seals to documents by both junior contributing and senior approving professionals of a given discipline is discouraged. Sealing of the documents by the individual closest to the working level is preferred.

In some cases, multiple seals are applied to documents to address the multi-discipline nature of the documents. In these cases, each responsible professional is to apply the seal complete with an indication or qualification of what discipline responsibility is implied by the seal, (e.g., civil, structural, mechanical, electrical). Like discipline qualifications may also be required (e.g., electrical power and lighting vs. process controls). Similarly, in cases where the work is carried out by multiple professions, the responsible professional is to apply the seal identifying the portion of the work for which they were directly responsible.

6.4 Imported Work Products and Seals of “Convenience”

Regardless of the place of origin, all engineering work products imported for application in Prince Edward Island must be sealed by a responsible professional registered with Engineers PEI.

An Engineers PEI registrant may be solicited by a professional from another jurisdiction to seal that individual’s documents. This is acceptable provided the Engineers PEI registrant performs a thorough and documented review of the subject engineering documents.

The review of the documents is to include an analysis of the applicable design criteria, design notes,

calculations and product selections. If calculations are not available to the Engineers PEI registrant, then said registrant is to perform calculations to validate the work. The Engineers PEI registrant in question will be assuming full responsibility for the sealed documents including the performance of the service or product described in those documents.

6.5 Revisions / Addenda

Document revisions are to be well documented to identify the boundaries of professional responsibility between original and revised versions. Changes are typically described on a revised document. A separate “summary of revisions” document may be issued as a complement to a revised document. A separate “summary of revisions” document may also be issued in lieu of issuing a revised version of a document. Regardless of the approach, all documents issued to address revisions (including addenda) are to be sealed by the responsible professional.

6.6 Translated Documents

Translated documents which require engineering judgement or which provide engineering direction are to be sealed by a responsible professional. If the professional is not sufficiently proficient to take responsibility for the translation, a bilingual engineer competent in the subject matter area should authenticate the translated portion of the document. In these cases, each responsible professional would apply their seal with a qualification of what responsibility is implied by the seal. Therefore, the bilingual professional would seal the translated portion of the document.

6.7 Withdrawal of Seal

When a responsible professional becomes aware that parameters have been changed which negate a document or if a document is otherwise being misapplied, the responsible professional may decide to no longer take responsibility for the work. This equates to the revocation of the approval that existed at the time the seal was applied and, therefore, the seal is to be removed from a document only by the responsible professional who sealed the document originally. Once removed, the responsible professional is to withdraw the original document and inform all those who may be affected by the withdrawal. A record is to be kept with the original document of any notices of withdrawal.

A seal is not to be withdrawn from a document which has been released to a client to leverage a contractual dispute with that client.

7.0 SPECIFIC REQUIREMENTS

7.1 Correspondence

Correspondence (letters, letter reports, memos) which require no engineering judgement, or which provide no engineering direction are not required to be sealed. Conversely, correspondence, which require engineering judgement or which provide engineering direction are to be sealed by the responsible professional.

7.2 Emails and Texts

Communication of professional engineering judgement through email, texts, and other electronic forms should

be followed by after-the-fact authentication in a timely manner. It is preferable, however, to produce a sealed hardcopy letter or report, and, to email this as an attachment to the recipient. Alternatively, digital certification may be employed.

7.3 Design Notes

It is recommended that design notes be prepared in a format which records the names of the responsible professional, designers and checkers including the dates on which the work was performed. Typically design notes are regarded as intermediate stage documents which form the basis for final sealed documents. As such, design notes need not be sealed.

If a sealed submission of design notes to a client, employer or other is required, it is recommended that the notes be assembled and sealed on the table of contents for a specific discipline or on a “sealing or stamping sheet” which clearly identifies the content and discipline responsibility covered by the seal.

7.4 Reports

Reports which require no engineering judgement, or which provide no engineering direction are not required to be sealed. Conversely, final reports which require engineering judgement or which provide engineering direction are to be sealed by the responsible professional. Reports are to be sealed on the table of contents for a specific discipline or on a “sealing or stamping sheet” which clearly identifies the content and discipline responsibility covered by the seal.

7.5 Design Drawings

Final drawings are to be sealed by the responsible professional in a prominent location, preferably in an allotted space in the title block or in the lower right-hand corner of the drawing.

It is difficult to seal all reproductions of drawings, therefore, it is acceptable to seal a drawing original from which reproductions are made. This original is to be clearly marked as such and archived to substantiate the work of the responsible professional should that prove necessary. The archived drawing original should bear a note to the effect “This drawing original is for record purposes and is not to be revised without the expressed approval of the responsible professional(s) under whose authority the document was sealed.” Typically, drawing originals are kept by the responsible professional, however, some clients may require that they be provided with the originals. In such cases, a copy or print of the original is to be retained by the responsible professional(s).

7.6 Manufacturer’s Drawings / Shop Drawings / Engineered Goods

Typically, manufacturer’s drawings need not be sealed as the drawings are catalogue cuts or promotional literature of mass-produced items which undergo the scrutiny of regulatory and/or manufacturing authorities. However, manufacturer’s drawings of custom products or other products that alter the original design of a responsible professional are to be sealed by the manufacturer’s responsible professional.

Drawings prepared by a fabricator for products under the fabricator’s design responsibility, for example structural connections, are to be sealed by the fabricator’s responsible professional.

The responsible professional for the larger system is required to authenticate that the commercially engineered good is properly integrated into the overall system and is suitable to achieve the intended purpose.

Commercially engineered goods that are used in a way that deviates from the manufacturer's specifications, or customized engineering goods must be sealed.

7.7 Record and As-Built Drawings

Drawings of record showing revisions based on information provided to the responsible professional(s) by another party who is not under the direction, control and supervision of the responsible professional and which have not been verified in detail by the responsible professional are not to be sealed. These drawings are to be revised and all changes documented as "Record information provided by another party" or equivalent. The original seal is to be replaced with a note referencing the original sealed document.

Drawings of record showing revisions based on information that has been verified in detail by the responsible professional are to be sealed. All changes made are to be marked accordingly and recorded on the drawings.

7.8 Specifications

Detailed specifications are to be sealed by the responsible professional. Specifications are to be sealed on the table of contents for a specific discipline or on a "sealing or stamping sheet" which clearly identifies the content and discipline responsibility covered by the seal.

Performance specifications and related drawings are often used for design-build projects or for the procurement of a module to complement a system design. Where the documents relate specifically to engineering, they are required to be sealed by the responsible professional(s) who prepared the documents. The seal is to be accompanied by a qualification such that it is clearly understood by all those using the documents what professional responsibilities are, and what professional responsibilities are not implied by the presence of the seal.

7.9 Manuals

Final manuals prepared for technical or public safety direction and guidance of others are to be sealed by the responsible professional. Manuals are to be sealed on the table of contents for a specific discipline or on a "sealing or stamping sheet" which clearly identifies the content and discipline responsibility covered by the seal.

7.10 Software and Other Electronic Work Products

When the creation or modification of software or computer programs require a seal and these programs can be represented in text or source code in a written document, the original written version of the document requires a seal.

Complex software and other electronic documents (i.e. 3D modeling, simulation software, etc.) that cannot be converted to hardcopy form, should be authenticated using digital certification.

All engineers are responsible to ensure that electronic/digital work products, particularly those using emergent technologies, meet the sealing requirements of the Act.

8.0 DOCUMENT RETENTION

There are no requirements in the Engineering Profession Act for retaining professional documents. Document retention is therefore done at the discretion of the responsible professional based on business considerations and the timeframes that a project might have an action against it.

In Prince Edward Island our limitation period is indefinite. A claim in negligence must be brought within 6 years of the cause of action arising, however, there's a discoverability rule, which means that the 6 year period does not commence until the date the claimant knew or ought to have known of material facts giving rise to the claim. In Prince Edward Island, such claims could last indefinitely, stretching well into retirement and beyond.

Professional liability insurers may also have specific requirements for document retention.

Documents (hard copy and electronic) that are retained should be stored in a manner that maintains their integrity and prevents unauthorized use of the documents and the professionals' seals that appear within them.

9.0 LIABILITY

9.1 Professional

Failure to comply with the provisions of the Act and By-laws regarding sealing of engineering documents can lead to disciplinary action by Engineers PEI with sanctions which may include revocation of one's registration.

9.2 Civil

When a registrant's seal is affixed to a final document, full responsibility is being taken for that document. Therefore, it implies that the engineering work contained therein is within the "area of competence" of the responsible professional and states that the work was prepared by or under that responsible professional's direct supervision.

Sealing of incomplete or inaccurate documents or documents which the responsible professional is not qualified to prepare or review may lead to possible civil liability.

Appendix A – Acceptable Certificate Authorities

- 1) Engineers PEI has a formal agreement with the Certificate Authority, Notarius, to issue digital certificates. Under the agreement, the Association verifies new applications and has the authority to revoke digital certificates. The Notarius certificate confirms that the professional engineer is a registrant in good standing with Engineers PEI at the time of authentication.
- 2) Any digital signature technology other than Notarius, must first be authorized and approved by Engineers PEI Council. Ordering information to the Notarius subscription service is available at: [Notarius Digital Signature | Engineers PEI](#).

Others will be added once qualified as per Section 6.4