

Position Statement on Sealed Truss Placement Diagrams for Residential Projects in the State of South Carolina

Released June 21, 2006

Issue:

Certain jurisdictions in South Carolina are requesting engineering seals on Truss Placement Diagrams (TPD) (also known as a truss placement plan, truss layout, framing plan or framing layout). The following information should be used to provide insight into why component manufacturers should seriously consider all the ramifications of providing seals on TPD for residential projects.

Background:

The TPD is not to be viewed as an engineering document except as stated below; rather it is provided to assist the installer in properly locating the trusses within the structure. All the necessary truss engineering and analysis is found on the Truss Design Drawings (TDD).

If a TPD is provided, it is recommended that the project's Building Designer or Registered Design Professional (RDP), if the local jurisdiction requires one for residential projects, review and approve the TPD to ensure that the intended load paths have not been altered.

ANSI/TPI 1 Chapter 2 (*see Appendix A*), as adopted by the 2003 International Residential Code (IRC) by reference, defines Building Designer:

ANSI/TPI 1-2002 Section 2.3.4 Building Designer: The Owner of the Building or the individual or organization (including either an Architect or Engineer or the Contractor) that contracts with the Owner for the design of the Building Structural System and/or who produces the Structural Design Documents.

The IRC defines RDP:

[B] REGISTERED DESIGN PROFESSIONAL. An individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

If a Truss Designer were to seal a TPD, it has been suggested that they could inappropriately be held responsible for ensuring the proper flow of loads through the truss to the bearing and support structure below the truss and into the foundation.

Truss Designers would only undertake Building Designer responsibilities under a special set of circumstances, including that they are professionally capable of taking on such responsibility and that they are properly compensated for the work.



Prepared with assistance from South Carolina Component Manufacturers Association, a local chapter of SBCA.

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Analysis:

Residential Construction Documents

According to the IRC Section R106.1 (*see Appendix B*):

IRC R106.1 Submittal documents. ...The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. ...

The construction documents should in turn clearly define the scope of the work proposed by the Building Designer or RDP:

IRC R106.1.1 Information on construction documents. ...Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations...

ANSI/TPI 1-2002 Chapter 2 (*see Appendix A*), which is adopted by reference in the IRC [*see Appendix B* (R102.4), (R502.11.1), (R802.10.2), and (Part IX, Referenced Standards, Chapter 43)], sets forth particular information that must also be contained in the construction documents so that the trusses can be properly designed for the residential structure. In preparing the construction documents, the Building Designer shall provide the following:

ANSI/TPI 1 Chapter 2

2.5.2 The Building Designer...shall provide the following:

- 2.5.2.1 All Structural Element and Truss orientations and locations;
 - 2.5.2.2 Information to fully determine all Truss profiles;
 - 2.5.2.3 All Structural Element and Truss bearing conditions;
 - 2.5.2.4 The location, direction, and magnitude of all dead and live loads applicable to each Structural Element and Truss...
 - 2.5.2.5 All Structural Element and Truss anchorage designs required to resist uplift, gravity, and lateral loads;
 - 2.5.2.6 Allowable vertical and horizontal deflection criteria and any specific criteria...
 - 2.5.2.7 Proper transfer of design loads affecting the Structural Elements and Trusses;
 - 2.5.2.8 Adequate connections between Trusses and between Structural Elements...but not Truss to Truss girder connections...
 - 2.5.2.9 Permanent bracing design for the Building...and permanent bracing for all Structural Elements and Trusses...
- 2.5.3 The Building Designer shall be responsible for the adequacy of the design of the Building Structural System [and]...shall evaluate the effect of the Trusses and the Structural Elements supplied, on the Building Structural System.

Truss Design and Preparation of Truss Design Drawings

Assuming the requisite information is provided within the construction documents issued by the Building Designer, the Truss Designer's sole responsibility is to properly design the trusses according to this information. Once designed, a truss is then depicted on a TDD. The Truss Designer is therefore specifically responsible for the single truss design depicted on each TDD.

Who Typically Prepares Truss Placement Diagrams?

Assuming the requisite information is provided in the construction documents, TPD are prepared by component manufacturer personnel who are not typically Truss Designers. The individuals preparing TPD are trained individuals who work as truss technicians, truss take-off specialists or truss salespeople. Because these TPD are typically prepared outside the Truss Designer's scope of work, they may not be reviewed or even seen by the Truss Designer and are therefore not prepared under the Truss Designer's direct supervision.

Why are Truss Placement Diagrams Prepared?

TPD are intended to assist customers, erectors and code enforcement officials in positioning or locating the trusses and related structural components supplied by the component manufacturer.

Their function is to serve as detailed installation instructions. They indicate the component manufacturer's assumed location for each truss or related component that has been designed and manufactured.

For example, a truss or related structural building component is no different than a window that is manufactured and in turn installed within a building. A window may be a highly engineered component of a house with specific installation specifications and instructions. However, there is no requirement to provide an engineer's seal on the installation instructions for windows.

To Require Truss Placement Diagrams to be Sealed Would Violate South Carolina Law

Because TPD are generally neither created by nor created under the immediate personal supervision of a licensed design professional, they cannot be sealed. To require that they be sealed is contrary to Section 40-22-270(3) of the South Carolina Code of Laws (*see Appendix C*) and Sections 49-207(C)(1) and 49-302(C) of the South Carolina Code of Regulations (*see Appendix D*), which state in pertinent part:

South Carolina Code of Laws

Section 40-22-270. Official seals; stamping on plans and specifications. Each licensee and each firm practicing under a certificate of authorization shall obtain a seal of the design authorized by the board and must comply with the following: ...

(3) Plans, specifications, plats, and reports prepared by a licensee or prepared under the licensee's direct supervision must be stamped with seals when filed with public authorities during the life of the licensee's certificate. ...

South Carolina Code of Regulations

Section 49-207. Seals: Individuals and Firms. C. Seal on Documents.

(1) The seal and signature of a licensee on a document constitutes a certification that the document was prepared by the licensee or under his direct supervision, and in the case of prototypical documents, that the licensee has reviewed the document in sufficient depth to fully coordinate and assume responsibility for plans prepared by another licensee.

Section 49-302. Competency for Assignments. C. The Engineer or Land Surveyor shall not affix his signature and seal to any engineering or land surveying plan or document dealing with subject matter to which he lacks competence by virtue of education or experience, nor to any such plan or document not prepared under his direct supervisory control.

The State of South Carolina Does Not Require Engineering on Most Residential Structures

Requiring a TPD to be prepared and sealed by the Truss Design Engineer is contrary to South Carolina law. This requirement would hold the building component manufacturing industry to a far greater standard than other similar industries.

According to Section 40-22-280(B)(2) of the South Carolina Code of Laws (*see Appendix C*), residential structures can be designed by persons who are not registered design professionals as follows:

Section 40-22-280. Exceptions from application of chapter.

(B) If drawings and specifications are signed by the authors with the true title of their occupations, this chapter does not apply to the preparation of plans and specifications for: ...

(2) buildings and structures less than three stories high and less than five thousand square feet in area, except that buildings of assembly, educational, hazardous, and institutional occupancies as defined by the Standard Building Code regardless of area are not exempt from the provisions of this chapter; and ...

The majority of residential structures are furthermore built using the prescriptive code within the building codes. Trusses are simply replacements for the prescriptively applied joists and rafters, which are also highly engineered structural elements.

When the Building Designer involved with a residential project is a RDP, it is up to them to evaluate every structural component, (e.g., rafters, joists, I-joists, and trusses) to ensure their structural adequacy and that they are applied so that the structure's protection of life/safety is assured. The placement of trusses is just one of the elements the RDP must consider. Joists, rafters, I-joists, LVL, PSL, and glulam are other equally important structural elements that must be evaluated and integrated properly. The RDP will seal all his/her engineering work. Typically the RDP delegates the design of the trusses to a Truss Design Engineer. The RDP will then review and approve all engineering performed by the Truss Design Engineer.

The International Code Committee (ICC) Has Recently Codified That Truss Placement Diagrams Should Not Be Sealed

Current versions of the IRC do not clearly define TPD. As such, some may wrongly infer that they are part of the "Truss Design Drawings" which are defined as follows [R502.11.4 and R802.10.1 (*see Appendix B*) (IRC 2003)]:

R502.11.4 Truss design drawings. Truss design drawings, prepared in compliance with Section R502.11.1, shall be provided to the building official and approved prior to installation. ...

R802.10.1 Truss design drawings. Truss design drawings, prepared in conformance with Section R802.10.1, shall be provided to the building official and approved prior to installation. ...

To clear up any confusion on this issue, Section 2303 of the 2006 IBC has been revised to include the following regarding "Truss Placement Diagram":

2006 IBC 2303.4.3 Truss Placement Diagram. A diagram supplied by the truss manufacturer that identifies the proposed location for each individually designated truss and references the corresponding Truss Design Drawing. The Truss Placement Diagram shall be provided as part of the Truss Submittal Package, and with the shipment of trusses delivered to the job site. Truss Placement Diagrams shall not be required to bear the seal or signature of the Truss Designer.

Exception: When the Truss Placement Diagram is prepared under the direct supervision of a registered design professional, it is required to be signed and sealed.

This change will provide much greater clarity and better communication and will appear in the 2006 Edition of the International Building Code. Identical language has been proposed and will be included in subsequent versions of the IRC.

Conclusion:

The South Carolina professional engineering law and the IRC provide the basis upon which to evaluate the need to provide an engineer's seal on a TPD. Based on this evaluation, TPD do not require a professional engineer's seal.

Appendix A

The language in RED signifies sections of the code or law that have been used in the foregoing document to make it easier for the reader to see the language in context.

ANSI/TPI 1-2002

National Design Standard for Metal Plate Connected Wood Truss Construction

Chapter 2 – Standard Responsibilities in the Design Process Involving Metal Plate Connected Wood Trusses

2.5 BUILDING STRUCTURAL SYSTEM DESIGN DOCUMENTS

- 2.5.1 The Building Designer, through the Structural Design Documents shall provide that the Structural Elements and Trusses shall not be subjected to adverse influences including, but not limited to moisture, temperature, and corrosive chemicals and gases. This provision shall specifically include notice for the Truss Designer of environments expected to result in wood moisture content exceeding 19 percent, and temperatures and/or corrosion potential that are unusually high relative to typical wood buildings.
- 2.5.2 The Building Designer, through the Structural Design Documents shall provide information sufficiently accurate and reliable to be used for facilitating the supply of the Structural Elements and for developing the design of the Trusses for the Building, and shall provide the following:
- 2.5.2.1 All Structural Element and Truss orientations and locations;
- 2.5.2.2 Information to fully determine all Truss profiles;
- 2.5.2.3 All Structural Element and Truss bearing conditions;
- 2.5.2.4 The location, direction, and magnitude of all dead and live loads applicable to each Structural Element and Truss including, but not limited to, loads attributable to: roof, floor, partition including any directions other than given in ANSI/TPI 1-2002, mechanical, fire sprinkler, attic, storage, rain loads and ponding, design wind speed and exposure category, snow, snow drift, unbalanced snow load, and seismic forces;
- 2.5.2.5 All Structural Element and Truss anchorage designs required to resist uplift, gravity, and lateral loads;
- 2.5.2.6 Allowable vertical and horizontal deflection criteria and any specific criteria per ANSI/TPI 1-2002;
- 2.5.2.7 Proper transfer of design loads affecting the Structural Elements and Trusses;
- 2.5.2.8 Adequate connections between Trusses and between Structural Elements, including Truss to Structural Element connections, but not Truss to Truss girder connections except such connections that are excluded from the scope of the Truss Designer's responsibilities.
- 2.5.2.9 Permanent bracing design for the Building, including bracing to resist wind, seismic, or other lateral forces, and permanent bracing for all Structural Elements and Trusses. The permanent bracing design shall incorporate the continuous lateral chord and web member bracing that is designated on the individual Truss Design Drawings into the overall bracing for the entire Building Structural System.
- 2.5.3 The Building Designer shall be responsible for the adequacy of the design of the Building Structural System or the adequacy of the Structural Design Documents. The Building Designer shall evaluate the effect of the Trusses and the Structural Elements supplied, on the Building Structural System.

Appendix B

2003 International Residential Code

Chapter 1 ADMINISTRATION SECTION 102: APPLICABILITY

IRC R102.4 Referenced codes and standards. The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

Chapter 1 ADMINISTRATION SECTION 106 ADMINISTRATION

IRC R106.1 Submittal documents. Construction documents, special inspection and structural observation programs, and other data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

IRC R106.1.1 Information on construction documents. Construction documents shall be drawn upon suitable material. Electronic media documents are permitted to be submitted when approved by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, rules and regulations, as determined by the building official.

Chapter 5 FLOORS

R502.11 Wood trusses.

R502.11.1 Design. Wood trusses shall be designed in accordance with approved engineering practice. The design and manufacture of metal plate connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared by a registered professional where required by the statutes of the jurisdiction in which the project is to be constructed in accordance with Section R106.1.

R502.11.4 Truss design drawings. Truss design drawings, prepared in compliance with Section R502.11.1, shall be provided to the building official at the time of inspection.¹ Truss design drawing shall be provided with the shipment of trusses delivered to the job site. Truss design drawings shall include, at a minimum, the information specified below:

1. Slope or depth, span, and spacing;
2. Location of all joints;
3. Required bearing widths;
4. Design loads as applicable;
 - 4.1 Top chord live load (including snow loads);
 - 4.2 Top chord dead load;
 - 4.3 Bottom chord live load;
 - 4.4 Bottom chord dead load;
 - 4.5 Concentrated loads and their points of application;
 - 4.6 Controlling wind and earthquake loads.
5. Adjustments to lumber and joint connector design values for conditions of use;
6. Each reaction force and direction;
7. Joint connector type and description (e.g., size, thickness or gauge); and the dimensioned location of each joint connector except where symmetrically located relative to the joint interface;

¹ SC Modification Number: IRC 2003 17. The section was modified by the Home Builders Association of Greater Columbia to eliminate the requirement for roof truss design approval prior to installation.

8. Lumber size, species and grade for each member;
 9. Connection requirements for:
 - 9.1 Truss-to-truss girder;
 - 9.2 Truss ply-to-ply;
 - 9.3 Field splices.
 10. Calculated deflection ratio and/or maximum description for live and total load;
 11. Maximum axial compression forces in the truss members to enable the building designer to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss drawing or on supplemental documents; and,
 12. Required permanent truss member bracing location.
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Chapter 8 ROOF-CEILING CONSTRUCTION

R802.10 Wood trusses.

R802.10.1 Truss design drawings. Truss design drawings, prepared in conformance with Section R802.10.1, shall be provided to the building official at the time of inspection.² Truss design drawings shall include, at a minimum, the information specified below. Truss design drawing shall be provided with the shipment of trusses delivered to the job site.

1. Slope or depth, span, and spacing;
2. Location of all joints;
3. Required bearing widths;
4. Design loads as applicable;
 - 4.1 Top chord live load (including snow loads);
 - 4.2 Top chord dead load;
 - 4.3 Bottom chord live load;
 - 4.4 Bottom chord dead load;
 - 4.5 Concentrated loads and their points of application;
 - 4.6 Controlling wind and earthquake loads.
5. Adjustments to lumber and joint connector design values for conditions of use;
6. Each reaction force and direction;
7. Joint connector type and description (e.g., size, thickness or gauge); and the dimensioned location of each joint connector except where symmetrically located relative to the joint interface;
8. Lumber size, species and grade for each member;
9. Connection requirements for:
 - 9.1 Truss-to-truss girder;
 - 9.2 Truss ply-to-ply;
 - 9.3 Field splices.
10. Calculated deflection ratio and/or maximum description for live and total load;
11. Maximum axial compression forces in the truss members to enable the building designer to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss drawing or on supplemental documents; and,
12. Required permanent truss member bracing location.

R802.10.2 Design. Wood trusses shall be designed in accordance with accepted engineering practice. The design and manufacture of metal plate connected wood trusses shall comply with ANSI/TPI 1. The truss design drawings shall be prepared by a registered professional where required by the statutes of the jurisdiction in which the project is to be constructed in accordance with Section R106.1.

² SC Modification Number: IRC 2003 20. Modification: The section was modified to eliminate the requirement for floor truss design approval prior to installation.

Part IX Referenced Standards
Chapter 43



Truss Plate Institute
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Standard reference number	Title	Referenced in code section number
TPI 1—2000	National Design Standard for Metal-plate-connected Wood Truss Construction	R502.11.1, R502.11.2, R802.10.2, R802.10.3, R802.11.1

Appendix C

South Carolina Code of Laws
Title 40 - Professions and Occupations
Chapter 22
Engineers and Land Surveyors

Section 40-22-270. Official seals; stamping on plans and specifications.

Each licensee and each firm practicing under a certificate of authorization shall obtain a seal of the design authorized by the board and must comply with the following:

(1) Individual seals must be under the personal custody and control of the licensee and bear the licensee's name, registration license number, and the legend "Professional Engineer" or "Professional Land Surveyor" except for licenses issued before July 1, 2001, which may have the legend "Registered Professional Engineer" or "Registered Land Surveyor". The seal also shall bear evidence of the license category for professional engineers and the tier designation for professional land surveyors.

(2) Seals for firms practicing under a certificate of authorization must bear the firm's name, authorization number, and location.

(3) Plans, specifications, plats, and reports prepared by a licensee or prepared under the licensee's direct supervision must be stamped with seals when filed with public authorities during the life of the licensee's certificate.

(4) Plans and specifications prepared by a licensee or prepared under the licensee's direct supervision must be stamped with seals when issued for use as job site record documents at construction projects within this State.

(5) It is unlawful to seal documents with a seal after the certificate of the licensee or the certificate of authorization in the case of firms named on the seal has expired or has been revoked or suspended unless the certificate has been renewed, reissued, or reinstated.

(6) Where individual seals are affixed to plans, specifications, plats, and reports, the licensee shall affix his signature and date under or across the face and beyond the circumference of the seal. The signature and date must not be applied in a manner that obliterates or renders illegible the licensee's license number or name.

(7) The clerk of court or the register of deeds for any county shall refuse to accept for filing or recording a map, plat, survey, or other document within the definition of land surveying, dated after July 1, 1977, which does not have affixed to it the personal signature and prescribed impression seal of a professional land surveyor. No charge may be made by a professional land surveyor for the application of his impression seal.

(8) The building official, or other designated authority charged with the responsibility of issuing building or similar permits, shall refuse to issue a permit for any undertaking, the plans and specifications for which would require the seal of a professional engineer, unless the permit applicant has furnished satisfactory evidence that the documents were prepared by an engineer licensed as required by this chapter or that the documents are exempt from the requirements of this chapter. The building official, or designated authority charged with the responsibility of issuing building or similar permits, shall report to the board the name and address of a person who has or is suspected to have violated a provision of this chapter or a regulation promulgated pursuant to this chapter relating to the unlicensed practice of engineering.

Section 40-22-280. Exceptions from application of chapter.

(A) This chapter may not be construed to prevent or to affect:

- (1) the practice of any other regulated profession or trade where the practice of the profession or trade may legitimately overlap the professions regulated by this chapter;
- (2) the work of an employee or other subordinate of a person holding a certificate of registration under this chapter;
- (3) the engineering work of regular employees of the government of the United States officially performing their duties for their employer on federal lands within this State, in the practice of engineering for the government, and where specified by federal statute;
- (4) the land surveying work of regular employees of the government of the United States officially performing their duties for their employer on lands within this State, in the practice of land surveying for the government, and where specified by federal statute;
- (5) the work or practice of a regular employee of a public utility, a telephone utility, or an electrical utility by rendering to the employing company engineering service in connection with its facilities which are subject to regulation, supervision, and control in order to safeguard life, health, and property by the Public Service Commission of this State, so long as the person is actually and exclusively employed. Engineering work not related to the exemption in this item where the safety of the public is directly involved must be accomplished by or under the responsible charge of a professional engineer;
- (6) the work or practice of a regular employee of an electric cooperative, when rendering to the employing cooperative engineering service in connection with its facilities which are subject to regulations and inspections of the Rural Electric Administration, if the person is actually and exclusively employed. Engineering work not related to the exemption in this item where the safety of the public is directly involved must be accomplished by or under the responsible charge of a professional engineer;
- (7) the work or practice of a regular employee of a state authority which is licensed by and subject to the safety regulations of the Federal Energy Regulatory Commission and which sells and distributes electric power to consumers, so long as the person is actually and exclusively employed. Engineering work not related to the exemption in this item where the safety of the public is directly involved must be accomplished by or under the responsible charge of a registered professional engineer; and
- (8) the work of a general contractor, specialty contractor, or material supplier in the preparation and use of shop drawings or other graphic descriptions used to detail or illustrate a portion of the work required to construct the project in accordance with plans and specifications prepared under the requirements of this chapter.

(B) If drawings and specifications are signed by the authors with the true title of their occupations, this chapter does not apply to the preparation of plans and specifications for:

- (1) farm buildings not designed or used for human occupancy;
- (2) buildings and structures less than three stories high and less than five thousand square feet in area, except that buildings of assembly, educational, hazardous, and institutional occupancies as defined by the Standard Building Code regardless of area are not exempt from the provisions of this chapter;** and
- (3) alterations to a building to which this chapter does not apply, if the alterations do not result in a change which would otherwise place the building under the application of this chapter.

(C) This subsection may not be construed to prejudice a law, ordinance, regulation, or other directive enacted by another political body or a requirement by a contracting authority which would otherwise require preparation of plans and specifications under the responsible charge of a professional engineer or professional land surveyor.

Appendix D

South Carolina Code of Regulations
Chapter 49: Department of Labor, Licensing and Regulation
South Carolina State Board of Registration for Professional Engineers and Land Surveyors

Article 2: General Provisions

49-200. Professional Engineer Licensure Requirements.

49-207. Seals: Individuals and Firms.

A. Description of Licensee's Seal.

(1) The seal of engineers and land surveyors licensed by the Board shall be 1 9/16 inches in diameter and similar to that prescribed for the Board. In the center there shall appear the registration number of the licensee along with the words:

- (a) "Registered Professional Engineer", for Category A engineers licensed prior to July 1, 2001.
- (b) "Licensed Professional Engineer", for Category A engineers licensed after July 1, 2001.
- (c) "Associate Professional Engineer--Restricted License", for Category B engineers.
- (d) "Professional Engineer and Land Surveyor", for Category A engineers holding dual registration.
- (e) "Professional Land Surveyor", for TIER A land boundary surveyors.
- (f) "Professional Photogrammetric Surveyor", for photogrammetric surveyors.
- (g) "Professional GIS Surveyor", for geographic information systems surveyors.
- (h) "Professional Land Surveyor--TIER B", for TIER B land surveyors.

(2) Rubber stamps or computer generated seals, identical in size, design and content with the approved impression seals may be used by the registrant where the use of an impression seal is not specifically required.

B. Description of Firm's Seal.

(1) The seal evidencing issuance of a Certificate of Authorization by this Board shall be 1 9/16 inches in diameter and similar to that prescribed for the Board. In the center there shall appear the name of the certificate holder and the assigned Certificate of Authorization number. In the space between the circle and the outside of the Seal there shall appear the words "South Carolina" and the words "Certificate of Authorization".

(2) Rubber stamps, impression seals, or computer generated seals, identical in size, design and content with the approved impression seals may be used by the organization.

C. Seal on Documents.

(1) The seal and signature of a licensee on a document constitutes a certification that the document was prepared by the licensee or under his direct supervision, and in the case of prototypical documents, that the licensee has reviewed the document in sufficient depth to fully coordinate and assume responsibility for plans prepared by another licensee.

(2) When sealing documents is required by statute, other authority or contract, each sheet of plans, drawings, documents, specifications and reports for engineering practice and of maps, plats, charts and reports for land surveying practice shall be sealed and signed by the licensee or permit holder preparing them, or in responsible charge of their preparation. The signature and date when the document was prepared must be affixed under or across the face and beyond the circumference of the seal but in a manner that does not obliterate or render illegible the licensee's name and number. Where the engineering or land surveying practice is provided through a firm such documents shall also carry the seal evidencing registration of the Certificate of Authorization.

(3) Where more than one sheet is bound together in one volume, the licensee or permit holder, who prepared said volume, or under whose direction and control said volume was prepared, may seal, date and sign only the title or index sheet, provided that the signed sheet clearly identifies all of the other sheets comprising the bound volume, and provided that any of the other sheets which were prepared by, or under the direction and control of, another licensee or permit holder, be sealed, dated and signed by said other licensee or permit holder. This provision, however, shall not apply to design drawings and construction plans prepared by or under the responsible charge of a licensee. Such documents shall carry the required seals, date and licensee's signature on each sheet.

(4) Additions, deletions or other revisions to sealed documents shall not be made, unless such changes are sealed, dated and signed by the licensee who made the revisions or under whose directions and control said revisions were made.

Article 3: Rules of Professional Conduct

49-302. Competency for Assignments.

The Engineer or Land Surveyor shall perform his services only in the areas of his competence.

A. The Engineer or Land Surveyor shall undertake to perform engineering or land surveying assignments only when qualified by education or experience in the specific technical field of professional engineering or land surveying involved.

B. The Engineer or Land Surveyor may accept an assignment requiring education or experience outside of his own field of competence, but only to the extent that his services are restricted to those phases of the project in which he is qualified. All other phases of such projects shall be performed by qualified associates, consultants, or employees.

C. The Engineer or Land Surveyor shall not affix his signature and seal to any engineering or land surveying plan or document dealing with subject matter to which he lacks competence by virtue of education or experience, nor to any such plan or document not prepared under his direct supervisory control.

D. In the event a question arises as to the competence of an Engineer or Land Surveyor to perform an engineering or land surveying assignment in a specific technical field of engineering or land surveying which cannot be otherwise resolved to the Board's satisfaction, the Board, either upon request of the Engineer or Land Surveyor or by its own volition, may require him to submit to an appropriate examination as determined by the Board.



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View all SBCA *Tech Notes* at www.sbcindustry.com/technotes.php