

Codes and Standards Information

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To: Codes and Standards Information
Subject: Engineers Electronic Signing and Sealing
Attachments: Engineers Electronic Signing and Sealing.pdf

Attached please find the current text of N.J.A.C. 13:40-8.1 and 8.1A. These rules, which allow engineers to seal documents electronically, were published in the *New Jersey Register* and became effective on November 16, 2015. Digitally-transmitted plans with electronic seals affixed in accordance with these rules should be accepted as part of a permit application.

Questions or concerns about the validity of an engineer's seal should be directed to the State Board of Professional Engineers and Land Surveyors at 973-504-6460 or by visiting their website at <http://www.njconsumeraffairs.gov/pels/Pages/default.aspx>.

TITLE 13. LAW AND PUBLIC SAFETY
CHAPTER 40. STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND
SURVEYORS
SUBCHAPTER 8. SEALING AND TITLE BLOCK REQUIREMENTS FOR PROFESSIONAL
ENGINEERS AND PROFESSIONAL LAND SURVEYORS

§ 13:40-8.1 Signing and sealing of documents

(a) All sealing of documents shall be done with a digital or an impression-type seal, the design of which shall be authorized by the Board and shall contain the name and license number of the professional engineer or professional land surveyor and the legend "Licensed Professional Engineer," "Licensed Land Surveyor" or "Licensed Professional Engineer and Land Surveyor," as the case may be. Alternatives, such as rubber stamp facsimiles of the seal shall not be permitted. Digital seals may be used, so long as they are in compliance with N.J.A.C. 13:40-8.1A.

(b) The application of a signature and seal to documents relating to the practice of professional engineering and/or professional land surveying shall indicate that the licensee has provided regular and effective supervision to those individuals performing services that directly and materially affect the quality and competence of the engineering or land surveying work rendered.

1. The following documents shall be signed and sealed and shall contain the name of the professional business entity and, if appropriate, the entity's certificate of authorization number:

i. Maps, plats, reports, descriptions, plans, design specifications, certifications or similar documents; and

ii. Shop drawings for the construction of buildings, structures and related equipment, or for other purposes, the preparation of which requires engineering calculations and/or engineering input. Catalog information and standard product information shall be exempt from the requirements of this section.

(c) The signature and/or seal signifies that the licensee takes professional responsibility for the document based upon the accepted standards of practice in place at the time the documents were sealed.

(d) Where the document includes the work of more than one professional, each professional shall sign and seal the document with clear reference to the work that he or she has performed. See N.J.A.C. 13:40-8.6 for title block requirements.

(e) A licensee shall not affix a signature and/or seal to documents constituting the practice of the

profession regulated which have been prepared by another person unless such work was performed under the direction and supervision of the licensee.

(f) Incomplete and/or draft plans, documents, and sketches, whether advanced or preliminary copies, shall be conspicuously identified and may be signed but shall not be sealed, provided the licensee inserts the language that "This is not a sealed document" in place of the seal in the title block.

13:40-8.1A Digital signatures and seals

(a) A digital signature and seal shall carry the same weight, authority, and effect as a handwritten signature and impression-type seal when the following criteria are met:

1. The digital signing and sealing process satisfies the requirements of the Digital Signature Standard (DSS) established by the National Institute of Standards and Technology, FIPS PUB 186-4, Digital Signature Algorithm Validation System, (2014), which is hereby incorporated by reference, as amended and supplemented. This standard may be obtained at the following website: <http://www.NIST.gov/>. The digital signature and seal must be:

i. Unique to the licensee;

ii. Verifiable by a trusted third party or some other approved process as belonging to the licensee;

iii. Under the licensee's direct and exclusive control; and

iv. Linked to a document in such a manner that the digital signature and seal is invalidated if any data in the document is changed. Once the digital signature and seal are applied to the document, the document shall be available in read-only format if the document is to be digitally transmitted.

(b) A licensee who digitally signs and seals a document shall maintain a digital copy of the electronically transmitted document that has also been digitally signed and sealed for future verification purposes in accordance with N.J.A.C. 13:40-3.4(b).

(c) The pictorial representation of the digital signature and seal shall be readily available to the Board upon Board request and shall be produced in a manner acceptable to the Board. It shall contain the same words and shall have substantially the same graphic appearance and size as when the image of the digitally transmitted document is viewed at the same size as the document in its original form.

(d) Licensees are responsible for the use of their private digital keys. A lost or compromised key shall not be used and the licensee shall cause a new key pair to be generated in accordance with the criteria described in (a) above. A licensee shall take all reasonable steps to ensure that a compromised key is invalidated, and shall inform all affected clients that the digital key has been compromised.



Effective November 16, 2015, the State Board of Professional Engineers and Land Surveyors amended NJAC 13:40 to allow digital signatures and seals. This is an acceptable practice for plan submittal by a licensed NJ engineer in order to comply with NJAC 5:23-2.15.

13:40-8.1 SIGNING AND SEALING OF DOCUMENTS

- a) All sealing of documents shall be done with a digital or an impression-type seal, the design of which shall be authorized by the Board and shall contain the name and license number of the professional engineer or professional land surveyor and the legend "Licensed Professional Engineer," "Licensed Land Surveyor" or "Licensed Professional Engineer and Land Surveyor," as the case may be. Alternatives, such as rubber stamp facsimiles of the seal shall not be permitted. Digital seals may be used, so long as they are in compliance with N.J.A.C. 13:40-8.1A.
- b) The application of a signature and seal to documents relating to the practice of professional engineering and/or professional land surveying shall indicate that the licensee has provided regular and effective supervision to those individuals performing services that directly and materially affect the quality and competence of the engineering or land surveying work rendered.
 - 1) The following documents shall be signed and sealed and shall contain the name of the professional business entity and, if appropriate, the entity's certificate of authorization number:
 - i) Maps, plats, reports, descriptions, plans, design specifications, certifications or similar documents; and
 - ii) Shop drawings for the construction of buildings, structures and related equipment, or for other purposes, the preparation of which requires engineering calculations and/or engineering input. Catalog information and standard product information shall be exempt from the requirements of this section.
- c) The signature and/or seal signifies that the licensee takes professional responsibility for the document based upon the accepted standards of practice in place at the time the documents were sealed.
- d) Where the document includes the work of more than one professional, each professional shall sign and seal the document with clear reference to the work that he or she has performed. See "N.J.A.C. 13:40-8.6 for title block requirements.
- e) A licensee shall not affix a signature and/or seal to documents constituting the practice of the profession regulated which have been prepared by another person unless such work was performed under the direction and supervision of the licensee.
- f) Incomplete and/or draft plans, documents and sketches, whether advanced or preliminary copies, shall be conspicuously identified and may be signed but shall not be sealed, provided that the licensee inserts the language that "This is not a sealed document" in place of the seal in the title block.

13:40-8.1A DIGITAL SIGNATURES AND SEALS

- a) A digital signature and seal shall carry the same weight, authority, and effect as a handwritten signature and impression-type seal when the following criteria are met:
 - 1) The digital signing and sealing process satisfies the requirements of the Digital Signature Standard (DSS) established by the National Institute of Standards and Technology, FIPS PUB 186-4, Digital Signature Algorithm Validation System, (2014), which is hereby incorporated by reference, as amended and supplemented. This standard may be obtained at the following website: <http://www.NIST.gov/>. The digital signature and seal must be:
 - i) Unique to the licensee;
 - ii) Verifiable by a trusted third party or some other approved process as belonging to the licensee;
 - iii) Under the licensee's direct and exclusive control; and
 - iv) Linked to a document in such a manner that the digital signature and seal is invalidated if any data in the document is changed. Once the digital signature and seal are applied to the document, the document shall be available in read-only format if the document is to be digitally transmitted.
- b) A licensee who digitally signs and seals a document shall maintain a digital copy of the electronically transmitted document that has also been digitally signed and sealed for future verification purposes in accordance with N.J.A.C. 13:40-3.4(b).
- c) The pictorial representation of the digital signature and seal shall be readily available to the Board upon Board request and shall be produced in a manner acceptable to the Board. It shall contain the same words and shall have substantially the same graphic appearance and size as when the image of the digitally transmitted document is viewed at the same size as the document in its original form.
- d) Licensees are responsible for the use of their private digital keys. A lost or compromised key shall not be used and the licensee shall cause a new key pair to be generated in accordance with the criteria described in (a) above. A licensee shall take all reasonable steps to ensure that a compromised key is invalidated, and shall inform all affected clients that the digital key has been compromised.

For more information, please visit <http://www.njconsumeraffairs.gov/regulations/Chapter-40-State-Board-of-Professional-Engineers-and-Land-Surveyors.pdf> or click on "Chapter 40 State Board of Professional Engineers and Land Surveyors Regulations" at <http://www.njconsumeraffairs.gov/pels/Pages/regulations.aspx>.