

DIGITAL SEAL AND SIGNATURE REGULATIONS

The Central Florida Tourism Oversight District (The District) will only accept digitally signed and sealed plans from third party certificate authorities. The following has been created to assist in understanding the requirements for creating a digital signature to meet State Statute requirements by using a third party certificate authority. The District is applying the following regulations across the board for all design professionals for efficiency and the legality of validating all design professionals' identities.

A Digital Signature

The online equivalent of a notarized signature. The Certificate Authority (CA) serves as the notary in terms of verifying an identity, while a trusted timestamp verifies the date and time the signature was applied. A digital signature is made up of several components:

- 1) **Adobe Acrobat Pro or Pro DC** – Most digital signatures are built using the Adobe platform. Step one creates the digital certificate. Step two involves scanning a professional's seal and saving the jpeg file on the computer hard drive. Acrobat then imports it into the digital signature. Step three will add the CA file, token key or serial number to the digital signature as verification of the design professional's identity.
- 2) **Digital Certificate** – A way of proving an identity in online transactions and is unique to each person when signing a document. The typical digital certificate includes the full name, email address and professional qualifications for signing.
- 3) **Certificate Authority** – A third party verification entity that certifies an identity. Software is used, or a token key on a smart card or USB drive is provided, that will attach to the digital certificate in Adobe Acrobat. Some companies require background checks or others ways to verify identity.
- 4) **Secure Hash** – When the design professional clicks "sign" in Adobe Acrobat, a unique digital fingerprint (called a hash) of the document is created using a mathematical algorithm. This hash is specific to this particular document; even the slightest change would result in a different hash. The hash is encrypted using the private key from the digital certificate. The encrypted hash and public key are combined into a digital signature, which is applied to the document.
- 5) **Professional's Seal** – Scan the wet stamp of the professional's seal into a 2" square jpeg file on the computer hard drive. It can then be integrated with the digital certificate using the Adobe software.

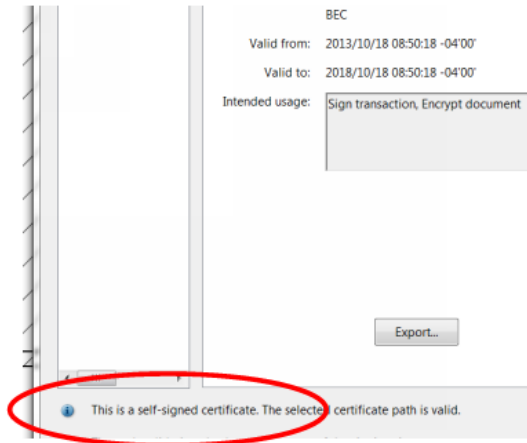
How does it work?

When a digital signature is applied on a drawing, a cryptographic operation binds the digital certificate and the data being signed such as a PDF or other drawing file into one unique descriptor. Any change to the drawing will remove that unique descriptor and will be indicated when opened in Adobe. A Signature Invalid warning will display, "This Document has been modified."

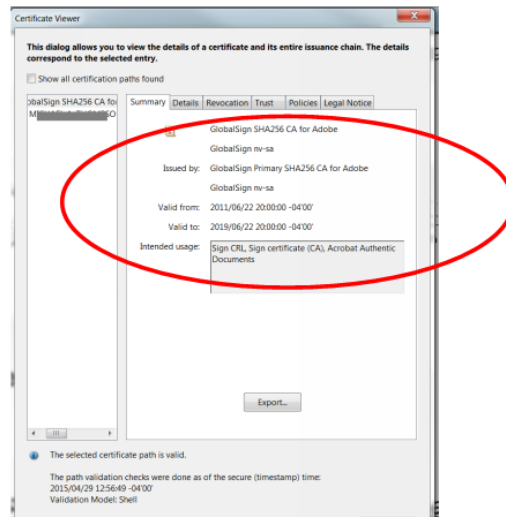
Authentication – Since a third-party validated certificate was used to apply the signature, recipients can easily verify the validity of the drawing. A right click on the digital signature displays a popup screen to validate the signature, showing the Summary, Certificate Authority, Revocation, Trust, Date/Time, Signature Properties and Policies. When the drawing is opened in Adobe, it will ask the recipient to validate the signature.

Data Integrity – When the signature is verified, it checks that the data in the document matches what was in the hash when the signature was applied. Even the slightest change to the original document results in a fail.

Identity, digital seal, and signature validated by a third party Certificate Authority – Some design professionals have successfully used CoSign, DigiCert, Entrust, Exostar, GlobalSign and IdenTrust, as an example. (Note: These authorities are not being promoted by the District, nor are they the exclusive authority accepted.) For example, these companies validate an identity, then have the design professional download software or provide a USB drive with a token key or serial number to add to the signature.



Wrong – Self Signed



Correct – Certificate Authority Attached

2023 Florida Statutes

Title XXXII REGULATION OF PROFESSIONS AND OCCUPATIONS

Chapter 471 ENGINEERING

SECTION 025 Seals.

471.025 Seals.—

(1) The board shall prescribe, by rule, one or more forms of seal to be used by licensees. Each licensee shall obtain at least one seal in the form approved by rule of the board and may, in addition, register his or her seal electronically in accordance with ss. 668.001-668.006. All final drawings, specifications, plans, reports, or documents prepared or issued by the licensee and being filed for public record and all final documents provided to the owner or the owner’s representative shall be signed by the licensee, dated, and sealed with said seal. Such signature, date, and seal shall be evidence of the authenticity of that to which they are affixed. Drawings, specifications, plans, reports, final documents, or documents prepared or issued by a licensee may be transmitted electronically and may be signed by the licensee, dated, and sealed electronically with said seal in accordance with ss. 668.001-668.006.

668.003 Definitions. — As used in this act:

- (1) “Certificate” means a computer-based record which:
 - (a) Identifies the certification authority.
 - (b) Identifies the subscriber.
 - (c) Contains the subscriber’s public key.
 - (d) Is digitally signed by the certification authority.
- (2) “Certification authority” means a person who issues a certificate.

- (3) “Digital signature” means a type of electronic signature that transforms a message using an asymmetric cryptosystem such that a person having the initial message and the signer’s public key can accurately determine:
- (a) Whether the transformation was created using the private key that corresponds to the signer’s public key.
 - (b) Whether the initial message has been altered since the transformation was made.
- A “key pair” is a private key and its corresponding public key in an asymmetric cryptosystem, under which the public key verifies a digital signature the private key creates. An “asymmetric cryptosystem” is an algorithm or series of algorithms which provide a secure key pair.
- (4) “Electronic signature” means any letters, characters, or symbols, manifested by electronic or similar means, executed or adopted by a party with an intent to authenticate a writing. A writing is electronically signed if an electronic signature is logically associated with such writing.

668.004 Force and effect of electronic signature. — Unless otherwise provided by law, an electronic signature may be used to sign a writing and shall have the same force and effect as a written signature.

Reference: <https://www.flsenate.gov/Laws/Statutes/2023/0471.025>

Reference (2): <https://www.flsenate.gov/Laws/Statutes/2023/0668.004>

Florida Administrative Code 61G15-23.004

61G15-23.004 Procedures for Digitally Signing and Sealing Electronically Transmitted Plans, Specifications, Reports or Other Documents.

- (1) Engineering plans, specifications, reports or other documents which must be signed, dated and sealed in accordance with the provisions of *Section 471.025, F.S.*, and *Rule 61G15-23.001, F.A.C.*, may be signed digitally as provided herein by the professional engineer in responsible charge. As used herein, the terms “certification authority,” and “digital signature” shall have the meanings ascribed to them in *Sections 668.003(2) and (3), F.S.*
- (2) A professional engineer utilizing a digital signature to electronically sign and seal engineering plans, specifications, reports or other documents shall have their identity authenticated by a certification authority and shall assure that the digital signature is:
- (a) Unique to the person using it;
 - (b) Capable of verification;
 - (c) Under the sole control of the person using it; and,
 - (d) Linked to a document in such a manner that the digital signature and correspondingly the document is invalidated if any data in the document is changed.
- (3) The affixing of a digital signature to engineering plans, specifications, reports or other documents as provided herein shall constitute the signing and sealing of such items.
- (a) A digitally created seal as set forth in *Rule 61G15-23.002, F.A.C.*, may be placed where it would appear if the item were being physically signed, dated and sealed.
 - (b) The date that the digital signature was placed into the document must appear on the document in accordance with subsection *61G15-23.001(4), F.A.C.*, and where it would appear if the item were being physically signed, dated and sealed.
 - (c) The engineering plans, specifications, reports or other documents being digitally signed and sealed shall include text to indicate the following and place it where an original signature would appear if the item were being physically signed, dated and sealed:
 - 1. The same information required by subsection *61G15-23.002(2), F.A.C.*, if a digitally created image of the seal is not use;
 - 2. The item has been digitally signed and sealed; and,
 - 3. Printed copies of this document are not considered signed and sealed and all signatures must be verified on any electronic copies.

(d) Formatting of seals and text similar to that depicted below shall be used. While the formatting may be altered, the text must remain identical.

1. When a digitally created seal is used:



This item has been digitally signed and sealed by [NAME] on the date adjacent to the seal.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

2. When a digitally created seal is not used:

[NAME], State of Florida, Professional Engineer, License No. [NUMBER]

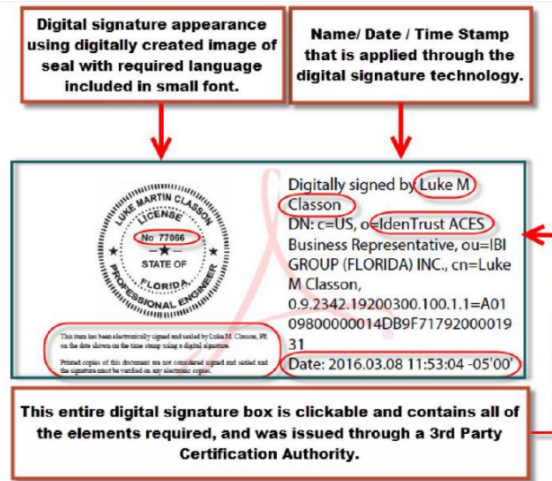
This item has been digitally signed and sealed by [NAME] on the date indicated here.

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

- (e) When engineering plans, specifications, reports or other documents contain multiple sheets or pages, the licensee may apply a single digital signature per electronically transmitted item as set out in *Rule 61G15-23.001, F.A.C.* A digital signature applied to an item in electronic form shall have the same force and effect as signing all of the individual sheets or pages contained within that item unless otherwise limited as specified in subsection *61G15-30.003(3), F.A.C.*
- (f) In the case where multiple licensees sign and seal a single item, each licensee shall apply their digital signature and include qualifying language with those items required in paragraph (e) of this rule, thoroughly describing what portions the licensee is taking responsibility for.
- (g) Beginning on the effective date of this rule amendment, November 2, 2020, and continuing until December 31, 2020, the restriction contained in subparagraph (3)(c)3., above, and the text of required language illustrated in subparagraphs (3)(d)1. and 2., that printed copies of digitally signed and sealed plans or documents are not considered signed and sealed is removed, and printed copies of said plans or documents are deemed validly signed and sealed for any purpose allowed by law. After December 31, 2020, the existing restriction is reinstated. Any licensee seeking to use printed copies of digitally signed and sealed plans or documents must retain an original copy of the signed and sealed plans.

Reference: <https://www.flrules.org/gateway/RuleNo.asp?title=SEALS&ID=61G15-23.004>

DIGITAL ENGINEER SEAL AND SIGNATURE SAMPLE



2023 Florida Statutes

Title XXXII REGULATION OF PROFESSIONS AND OCCUPATIONS

Chapter 481 ARCHITECTURE, INTERIOR DESIGN, AND LANDSCAPE ARCHITECTURE

481.221 Seals; display of certificate number.—

- (1) The board shall prescribe, by rule, one or more forms of seals to be used by registered architects holding valid certificates of registration.
- (2) Each registered architect shall obtain one seal in a form approved by rule of the board and may, in addition, register her or his seal electronically in accordance with *ss. 668.001-668.006*. All final construction documents and instruments of service which include drawings, plans, specifications, or reports prepared or issued by the registered architect and being filed for public record shall bear the signature and seal of the registered architect who prepared or approved the document and the date on which they were sealed. The signature, date, and seal shall be evidence of the authenticity of that to which they are affixed. Final plans, specifications, or reports prepared or issued by a registered architect may be transmitted electronically and may be signed by the registered architect, dated, and sealed electronically with the seal in accordance with *ss. 668.001-668.006*.

Florida Administrative Code 61G16.005

61G1-16.005 Procedures for Digitally Signing and Sealing and for Electronically Transmitting Plans, Specifications, Reports or Other Documents.

- (1) Information stored in electronic files representing plans, specifications, plats, reports, or other documents which must be sealed under the provisions of *Chapter 481, F.S.*, shall be signed, dated and sealed by the architect or interior designer in responsible charge.
 - (a) A scanned image of an original signature shall not be used in lieu of a digital or electronic signature unless such scanned image of a digital signature is required by any governmental entity as part of its procedure for submitting and accepting the documents identified in this rule during the Covid-19 pandemic.
 - (b) The date that the electronic signature file was created or the digital signature was placed into the document must appear on the document in the same manner as date is required to be applied when a licensee uses the manual sealing procedure set out in *Rule 61G1-16.003, F.A.C.*

- (2) An architect or interior designer utilizing a digital signature to seal construction documents shall assure that the digital signature is:
 - (a) Unique to the person using it;
 - (b) Capable of verification;
 - (c) Under the sole control of the person using it; and
 - (d) Linked to a document in such a manner that the electronic signature is invalidated if any data in the document are changed.
- (3) Each electronically signed file shall have an authentication code defined as a message digest described in Federal Information Processing Standard Publication 180-4 “Secure Hash Standard,” March 2012, which is hereby adopted and incorporated by reference by the Board and can be obtained from <http://www.flrules.org/Gateway/reference.asp?No=Ref-01340> or the internet website: <http://csrc.nist.gov/publications/fips/fips180-4/fips-180-4.pdf>.

Reference: <https://www.flrules.org/gateway/RuleNo.asp?title=SEALS%20AND%20PLANS&ID=61G1-16.005>