

ELECTRONIC DOCUMENT SUBMITTAL GUIDE

Please read the following instructions carefully as improperly formatted documents and/or plans will delay the review process for your project.

Portable Document Format (P.D.F.) is the current industry standard for electronic plans. Brevard County is using Adobe Acrobat Pro version 11 for upload and review of electronic documents.

Document File Format Requirements

All documents must be in Portable Document Format (P.D.F.), must be compatible with Adobe Acrobat Pro version 11, and must be properly formatted as follows:

- Layers: Multiple layers will not be accepted; Layers must be merged or flattened.
- Maximum Size: 250 megabytes (M.B.)
- Resolution: 300 pixels per inch (P.P.I.)
- Color depth: Monochrome (1-bit)
- Page Order: Pages must be in order and oriented for viewing.

Examples of Unacceptable Documents

- Incorrect sheet size, scale or margins
- Color plans
- Individual files for each sheet of the plans

Document Upload Standards

- Upload construction plans as a single, multiple-page document. Do not submit individual sheets as separate documents.
- For large plans exceeding the maximum file size, you may provide separate documents for the different portions of the plans, named accordingly, such as ARCHITECTURAL PLANS, STRUCTURAL PLANS, MECHANICAL PLANS, ELECTRICAL PLANS, PLUMBING PLANS, etc.
- Supporting documents such as Product Specifications and Approvals may be submitted as individual documents or as a combined multi page file.
- Name all plans and document files clearly describing the contents, i.e., CONSTRUCTION PLANS, ENERGY CALCULATIONS, TRUSS DRAWINGS, PRODUCT APPROVALS, etc.
- Plans must be generated to scale (e.g. 1/4" = 1', 1/8" = 1', or 1:10)
- Documents prepared by design professionals must be digitally signed and have third party Certificate Authority signature verification.
- Plans prepared by professional engineers or architects must be digitally signed and sealed in accordance with Florida Statutes, laws, and rules governing digital signatures.

NOTE: The specific requirements an engineer has to meet for a digital signature

are found in the Florida Administrative Code 61G15-23 and for an architect they are found at 61G1-16.

REVISED DOCUMENTS

When responding to review comments, upload complete sets of revised plans and documents, including sheets that have not been altered, revised, or changed.

For example: An original set of construction plans is submitted for review that has 15 sheets total. The review is completed and deficiency comments are noted on the plans indicating code deficiency issues on sheet 2 and sheet 5. The customer must resubmit a complete full set of the revised construction plans (all 15 sheets), not just revised sheets 2 and 5.

DIGITAL SEAL AND SIGNATURES

Electronically submitted plans, specifications, reports or other documents prepared by design professionals (Florida Registered-Architects and Interior Designers, Professional Engineers, and Professional Surveyors) must utilize digital signatures to electronically sign and seal such documents in accordance with Florida Statutes, Laws, and Rules.

Reference Links to Florida Statutes and Rules concerning electronic seals:

- Florida Statute Chapter 668.001-688.006 Electronic Signatures - [F.S. Chapter 688](#)
- Professional Engineers - [F.S. Chapter 471.025](#) and [Florida Rule 61G15-23.005](#)
- Architects and Interior Designers - [F.S. Chapter 481.221](#) and [Florida Rule 61G1-16.005](#)
- Surveyors and Mappers - [F.S. Chapter 472.025](#) and [Florida Rule 5J-17.062](#)

Digital Signature

Digital signatures are an online equivalent of a notarized signature. A Certificate Authority (C.A.) serves as the notary in terms of verifying your identity while a trusted timestamp verifies the date and time the signature was applied. Digital signatures allow users to keep their entire workflow online. Individuals can certify and sign drawings and documents as needed right from the comfort of their computers.

Digital Signatures components:

1. Adobe Acrobat – Digital Signatures are built using the Adobe platform.
 - a. Step one creates the digital certificate.
 - b. Step two involves scanning a professional’s seal and saving the j-peg file on the computer hard drive. Acrobat lets you import it into the digital signature.
 - c. Step three will add the Certificate Authority (C.A.) file, token key or serial number to the digital signature as verification of the professional Engineer’s identity.

2. Digital Certificate - A way of proving your identity in online transactions and is unique to you when signing a document. The typical digital certificate includes your full name, email address and your professional qualifications for signing.
3. Certificate Authority (C.A.) - A third party verification entity that certifies your identity. They will use software or send you a Token Key on a Smart Card or U.S.B. drive 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 professional's 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 j-peg file on the computer hard drive. It can then be integrated with your digital certificate using the Adobe software.

How does it Work?

When you apply a digital signature on a drawing, a cryptographic operation binds the digital certificate and the data being signed into one unique descriptor. Any change to the drawing will remove your 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 pop up screen to validate the signature, show 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 a fail.

Certificate Authority

As mentioned earlier you must have a third party company verify your identity via an added digital certificate. Each company will vary in the way they verify your identity and how you receive the digital certificate. Most will have you either download software or send you the certificate on a smart card or U.S.B. drive to attach to the computer you will be using. Each will show you how to attach the Certificate Authority's digital certificate to your digital seal and signature combo.

The required digital certificate will be similar to those used by Florida Department of Transportation (F.D.O.T.) such as an Access Certificate for Electronic Services

(A.C.E.S.). This type will meet the Laws & Rules set by the State of Florida for signing and sealing documents that are delivered electronically.

While we cannot recommend which third party company to use we have narrowed the list to the following companies that meet the requirements for signing construction plans and are already in use by other local design professionals.

Approved Certification Authority Companies

- [Identrust](#)
- [Cosign](#)
- [Globalsign](#)