Special Notice to Contractors - 24

1. SCOPE

- 1.1 This chapter intends to provide guidelines to the Contractor or Sub-Contractor so that they can properly present their materials for inclusion in the construction project.
- 1.2 The Contractor shall follow the procedures listed below to ensure the proper inspection, sampling, testing, and certification of materials and products incorporated into all construction projects.
- 1.3 "Prequalification of Bidders" (Standard Specifications, Subsection 102.01) is synonymous with any reference to the CDOT "Pre-Qualification List". A Prime Contractor requiring additional information regarding bidding can go to https://www.codot.gov/business/bidding.
- 1.4 The Qualified Manufacturers List (QML) is used for suppliers of Steel Reinforcing Bars & Steel Dowel Bars, Epoxy Coaters for Reinforcing Steel, and Precast Concrete Structures. These products are required to be selected off the QML. All relevant details for the proper submittal of specified Standard Manufactured Materials and Fabricated Structural Materials are found in CDOT's Field Materials Manual under CP 11, Quality Management Plans for the Qualified Manufacturers List, or the Approved Products List.
- 1.5 E-Signature for CDOT Construction PROJECT Guidelines

	Electr	onic Record (Preferred)		Paper Record		
	Electronic Sig	nature	Scanned Record	Original		
	Type I Signature	Type II Signature	Scallied Record	with Wet Signature		
5	Law or regulation that dictates requirements Governed by the Bylaws and Rules of the Colorado State Board of Licensure for Architects, Professional Engineers, and Professional Land Surveyors or the Department of Personnel & Administration,	Virtual fingerprint that is unique to a person or entity and used to identify the signer Certifications and Buy America Signatures shall include the signer's name, date, and time the	Scanned copy of an Original record or a copy of a record in PDF or another format	Document with a signature by a person who physically marks a document using a pen		
Definition	Office of the State Controller	document was signed in addition to locking the document after signing		Сору		
	Includes an attached digital authentication process that uses public key infrastructure or signature dynamics technology (encryption)	tocking the document after signing	Ç	Reproduction of the original paper record		
	Unique to the person, capable of verification, under the individual's sole control, and linked	TO.		Scanned copy of an original paper record		
	so changes invalidate the electronic signature	COX		Printed copy of an electronic record (invalidates the electronic signature)		
Record Type	Required on these electronic records: • Professional Engineer Seal • Professional Land Surveyor Seal • Change Orders • Notary • Agreements and Contracts with CDOT (including MOUs and MOAs)	Any electronic record not requiring a Type I signature may use Type II signature	A paper record may be scanned and becomes a copy A scanned record that requires a Type I signature or an original wet signature becomes an electronic copy	Original Paper Records that include a P.E. Seal, P.L.S. Seal, Change Orders, and notarized signatures require an original wet signature. A copy or scanned copy of these records is not an acceptable Original Record		
software	A particular software is not specified for Type I signatures Examples of software that meets the requirements - DocuSign and AdobeSign Examples of software that <u>DOES NOT</u> meet requirements - Adobe DC Pro and Blue Beam	CDOT approved electronic signature software. Examples of software include Adobe DC Pro, Blue Beam, DocuSign, and Adobe Sign.	contain only Type I el	ith a Type I signature will electronic signatures. Do not s with Type II signatures or wet		

2. PROVIDE NOTIFICATION OF MATERIALS SOURCES AND SUPPLIERS

- 2.1 Per Subsection 106.01 of the Standard Specifications: The Contractor shall submit a formal list of material sources and suppliers to the Engineer at least two weeks before delivery; however, it is preferable that the list be presented at the Pre-Construction Meeting. The Department will sample, and test materials proposed by the Contractor to be utilized for Items 203, 206, and 304. If the Department test results indicate the material is not in conformance with the project specifications, the Contractor is directed to Subsection 106.02 regarding Contractor Source materials and additional testing requirements.
- 2.2 The list shall include: item to be supplied, quantity, a reference to the level of acceptance required by CDOT (per Section 7, Designated Products and Assemblies), company's name and address manufacturing the material or product, and contact person (if the material is to be pre-inspected or if a problem exists with the material delivered). The submitted list shall indicate, immediately after the item being referenced, the applicable acceptance level required:
 - (A) Pre-Inspection (PI)
 - (B) Certified Test Report (CTR)
 - (C) Certificate of Compliance (COC)
 - (D) Pre-Approved (per APL &/or QML)
- 2.3 All required product or material documentation shall be provided at the point and time of delivery to the construction project. Failure to provide the required documents, such as CTRs and COCs, may result in the rejection of the materials. Failure to utilize the QML or APL may result in the rejection of the materials.
- 3. INNOVATIVE CONTRACTING (DESIGN / BUILD PROJECTS, CM/GC PROJECTS, ETC.) MATERIALS DOCUMENTATION RECORD, CDOT FORM #250
- 3.1 Two weeks before construction of any element of work the Contractor shall furnish the Engineer a schedule of items, approximate quantities to be incorporated into the project, and a reference to the method of acceptance required by CDOT (per Section 7, Designated Products and Assemblies). This information is to include the item of work with its placement location and dates. The Contractor shall immediately notify the Engineer, in writing, if the items of work or quantities are revised.
- 3.2 At the completion of the project, the Contractor shall furnish the Engineer with a completed CDOT Form 250 either created before the start of the project or at the end of the project by the Materials Documentation Unit Materials Documentation Record listing items utilized to construct the project and the approximate quantity of each item.

4. BUY AMERICA REQUIREMENTS FOR IRON AND STEEL

- 4.1 All manufacturing processes, including the application of a coating, for all steel and iron products permanently incorporated in the work shall have occurred in the United States of America.
- 4.1.1 All manufacturing processes are defined as "processes required to change the raw ore or scrap metal into the finished, in-place steel or iron product". Manufacturing begins with the initial melting and mixing and continues through the coating stage. Any process which modifies the chemical content, the physical size or shape, or the final finish is considered a manufacturing process. Use of pig iron and processed, pelletized, and reduced iron ore manufactured outside of the United States is currently permitted to be used in the domestic manufacturing process for steel and iron per a nationwide waiver by FHWA which was granted on March 24, 1995 (FR Doc No: 95-7362).
- 4.1.2 Examples of products that are subject to Buy America requirements include, but are not limited to, the following:
 - steel or iron products used in pavements, bridges, tunnels, or other structures, which
 include, but are not limited to, the following: fabricated structural steel, reinforcing steel,
 piling, high strength bolts, anchor bolts, dowel bars, permanently incorporated sheet piling,
 bridge bearings, cable wire/strand, pre-stressing / post-tensioning wire, motor/machinery
 brakes and other equipment for moveable structures.
 - guardrail, guardrail posts, end sections, terminals, cable guardrail.
 - steel fencing material, fence posts.
 - steel or iron pipe, conduit, grates, manhole covers, risers.
 - mast arms, poles, standards, trusses, or supporting structural members for signs, luminaires, or traffic control systems; and
 - steel or iron components of precast concrete products, such as reinforcing steel, wire mesh, and pre-stressing or post-tensioning strands or cables.
- 4.1.3 Examples of products that are exempt from Buy America requirements include, but are not limited to, the following:
 - cabinets, covers, shelves.
 - clamps, fittings, sleeves.
 - washers, bolts, nuts, screws.
 - tie wire, spacers; chairs.
 - lifting hooks.
 - faucets; and
 - door hinges.
- 4.1.4 Buy America will not prevent a minimal use of foreign steel or iron provided the total project delivery cost of all such steel and iron which includes the cost of delivering the steel and iron to the project, does not exceed one-tenth of one percent (0.1%) of the total contract cost or \$2,500, whichever is greater.

4.1.5 The <u>Contractor</u> shall maintain the certifications on file at the project that every process, including the application of a coating, performed on steel or iron products either has or has not been carried out in the United States of America.

Per CDOT Standards and Specification Section 106.11(a) Steel and Iron, before permanent incorporation of any steel or iron product into the project (domestic or foreign), the Contractor shall obtain such a certification from each supplier, distributor, fabricator, and manufacturer that has handled each steel or iron product. These certifications shall create a chain of custody trail that includes every supplier, distributor, fabricator, and manufacturer that handles the steel or iron product. The lack of these certifications will be justification for rejection of the steel or iron product.

The Contractor shall maintain a document summarizing the date and quantity of all steel and iron material delivered to the project. The document shall show the pay item, quantity of material delivered to the project, along with the quantity of material installed by the cutoff date for the monthly progress payment. The summary shall also reconcile the pay item quantities to the submitted Buy America certifications. The Contractor shall also maintain documentation of the project delivered cost of all foreign steel or iron permanently incorporated into the project. Both documents shall be submitted to the Engineer within five days of the cutoff date for the monthly progress payment. A monthly summary shall be submitted even if no steel or iron products are incorporated into the project during the month. The summary document does not relieve the Contractor of providing the necessary Buy America certifications of steel and or iron prior to permanent incorporation into the project. Examples of required certifications are shown later in the Special Notice to Contractors section of this Manual.

Note 1: CDOT Standards and Specifications Subsection 106.11(a) Steel and Iron, contains specific information on Buy America Requirements. Additionally, the Buy America webpage contains links to resources such as the Buy America for Steel and Iron TETP eLearning course.

The Buy America webpage can be found at the following link: https://www.codot.gov/business/designsupport/buy-america-requirements

4.2 MANUFACTURED PRODUCTS

4.2.1 Regulations require the use of domestic steel and iron in Federally funded construction projects. Buy America applies to construction components which are "predominantly steel products," defined by CDOT as products which are manufactured with at least 90% steel or iron content by weight when delivered to the job site for installation. (See "4.1.2" for examples.) The FHWA's 1983 final Buy America regulations (see https://www.fhwa.dot.gov/programadmin/contracts/112583.cfm) waive the application of Buy America to manufactured products that do not include steel and iron components (See "4.1.3" for examples.). However, Buy America applies to the steel wire mesh or steel reinforcing components of manufactured products (i.e., precast reinforced concrete elements).

5. BUY AMERICA REQUIREMENTS FOR CONSTRUCTION MATERIALS (excludes Iron and Steel)

- Per Subsection 106.11(c) of the Standard Specifications and the Infrastructure Investment and Jobs Act ("IIJA"), Pub. L. No. 117-58, which includes the Build America, Buy America Act ("the Act"). Pub. L. No. 117-58, §§ 70901-52 (published November 15, 2021): All manufacturing processes on eligible construction materials permanently incorporated into the work must have occurred in the United States. All manufacturing processes shall include at least the final manufacturing process and the immediately preceding manufacturing stage for the construction material.
- 5.1.1 Eligible construction materials are those that are or consist primarily of:
 - Non-ferrous metals.
 - Plastic and polymer-based products (including polyvinyl chloride PVC)
 - Glass
 - Lumber; or
 - Drywall.

Items that consist of two or more of the listed materials that have been combined together through a manufacturing process, and items that include at least one of the listed materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. For example, a plastic framed sliding window should be treated as a manufactured product while plate glass should be treated as a construction material.

Note 2: Raw materials such as cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives are excluded from Buy America requirements.

- 5.1.2 Examples of construction materials that are subject to Buy America requirements include, <u>but are not limited to</u>, the following:
 - Non-ferrous metals
 - Aluminum railing
 - Aluminum pipe
 - Aluminum end sections
 - Aluminum posts
 - Aluminum light standards
 - Aluminum signs (if no reflective coatings or paint are used)
 - Aluminum mast arms
 - Aluminum structural plate + components
 - Electrical systems
 - Controller cabinets (cabinet only)
 - Electrical conductors
 - Copper pipe
 - Copper wire
 - Metal landscape border
 - Earth/soil anchors
 - Metal conduits
 - Drains/valves
 - Plastics and polymers
 - Plastic pipe (including PVC)
 - Expansion joint materials
 - Geogrids
 - Geotextiles
 - Plastic fence posts
 - Plastic delineator posts
 - Gaskets
 - Plastic conduits
 - Plastic fences
 - Median cover material plastic sheeting
 - Prestressing duct enclosures
 - Plastic fittings
 - Plastic valves
 - Water stops/Sealing materials.
 - Culvert linings
 - Slip linings.
 - Paints/coatings
 - Timber
 - Wood railing
 - Wood fence posts
 - Wood guardrail post
 - Wood fence
 - Wood noise barrier
 - Timber decks.
 - Timber light standard.
 - Timber signposts.
 - Wood stakes for landscaping and erosion control (if permanent)
 - Cattle guard components
 - Timber barricades.

- Glass
 - Glass beads for pavement marking.
 - Optic glass
 - Lighting (if only one part is placed, i.e., the glass cover)
- 5.1.3 Before the permanent incorporation of any eligible construction material into the project, the Contractor shall obtain a certification from each material supplier. This certification shall verify that the construction material was manufactured in the United States.

The Contractor shall maintain and submit a Contractor's Certificate of Compliance (COC) for Construction Materials and Manufactured Products [CDOT Form 1600] monthly. The CDOT Form 1610 will be used to fill the gap when no construction materials are permanently incorporated, and BABA documentation exists in the Project Files. Having the CDOT Form 1610 will address FHWA's concerns for project audit. (See example of the Forms 1600, and 1610 in this chapter). The COC shall contain the following information on all eligible construction materials:

- Contract ID
- Project Number
- Project Location
- Contractor Name
- Date
- CDOT Pay Item Number
- Pay Item Description
- Manufacturer Name
- Material Identifier (Lot, heat, batch, order number, etc.)
- Delivered Quantity
- Delivered Date
- Installed Quantity
- Installed Date
- Buy America compliance certification.
- Contractor representative signature
- Pay Item Unit

The CDOT Contractor's Certificate of Compliance (COC) can be downloaded from the following link:

https://www.codot.gov/business/designsupport/buy-america-requirements

The COC does not relieve the Contractor of providing the necessary Buy America supplier certifications for any eligible construction material prior to permanent incorporation into the project. Upon request, the Contractor shall allow the State, FHWA, and their representatives access to the Buy America certifications. The lack of these certifications will be justification for rejection of the construction material as per CDOT Standards and Specifications Section 106.11(d) Construction Materials.

5.2 BUY AMERICA WAIVERS

- 5.2.1 Waivers for Buy America requirements may be considered by the Federal Highway Administration. Waivers are not and cannot be issued or approved by CDOT. Per Section 70914(c) of the Build America, Buy America Act, the head of a Federal agency may waive the application of a Buy America preference under an infrastructure program in any case in which the head of the Federal agency finds that
 - a. applying the domestic content procurement preference would be inconsistent with the public interest (a "public interest waiver").
 - b. types of iron, steel, manufactured products, or construction materials are not produced in the United States in sufficient and reasonably available quantities or of a satisfactory quality (a "nonavailability waiver"); or
 - c. the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent (an "unreasonable cost waiver").
- 5.2.2 Federal agencies are responsible for processing and approving all waivers, including waivers requested by recipients and on behalf of subrecipients. Federal agencies may reject or grant waivers in whole or in part. To the greatest extent practicable, waivers should be targeted to specific products and projects.
- 5.2.3 Before issuing a waiver, the head of the Federal agency must make publicly available on the agency's website a detailed written explanation for the proposed determination to issue the waiver and provide at least 15 days for public comment on the proposed waiver. General applicability waivers are subject to a minimum 30-day public comment period. Federal agencies must submit to MIAO (Made in America Office) a proposed waiver for review after the public comment period has concluded. MIAO will review the proposed waiver to determine if it is consistent with applicable law and policy and will notify the Federal agency of its determination. A link has been provided for a summary of the Made in America Waiver process.

https://www2.ed.gov/policy/fund/guid/buy-america/index.html

All waiver requests must include a detailed justification for the use of goods, products, or materials mined, produced, or manufactured outside the United States, a certification that there was a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and nonproprietary communications with potential suppliers. Each proposed waiver submitted to MIAO should include the following information, as applicable:

- Waiver type (nonavailability, unreasonable cost, or public interest)
- Recipient name and Unique Entity Identifier (UEI)
- Federal awarding agency organizational information (e.g., Common Government wide Accounting Classification (CGAC) Agency Code)
- Financial assistance listing name and number
- Federal financial assistance program name
- Federal Award Identification Number (FAIN) (if available)
- Federal financial assistance funding amount
- Total cost of infrastructure expenditures, including all Federal and non-Federal funds (to the extent known)
- Infrastructure project description and location (to the extent known)
- List of iron or steel item(s), manufactured products, and construction material(s) proposed to be exempt from Buy America requirements, including name, cost, country(ies) of origin (if known), and relevant PSC and NAICS code for each.
- A certification that the Federal official or assistance recipient made a good faith effort to solicit bids for domestic products supported by terms included in requests for proposals, contracts, and nonproprietary communications with the prime contractor.
- A statement of waiver justification, including a description of efforts made (e.g., market research, industry outreach), by the Federal awarding agency and, and in the case of a project or award specific waiver, by the recipient, in an attempt to avoid the need for a waiver. Such a justification may cite, if applicable, the absence of any Buy America-compliant bids received in response to a solicitation.
- Anticipated impact if no waiver is issued.
- Any relevant comments received through the public comment period.

Federal agencies will use the following principles before issuing a waiver of any type:

- **Time-limited**: A Federal agency may determine a waiver should be constrained principally by a length of time, rather than by the specific projects to which it applies. Waivers of this type may be appropriate, for example, when an item that is "not available". When issuing such a waiver, the agency should identify a short, definite time frame (e.g., no more than one to two years) designed to ensure that, as domestic supply becomes available, domestic producers will have prompt access to the market created by the program.
- Targeted: Waivers that are not limited to particular projects should apply only to the item(s), product(s), or material(s) or category(ies) of item(s), product(s), or material(s) necessary.
- **Conditional**: Federal agencies may issue waivers with specific conditions that support the policies of the Act and the Executive Order.

These principles and criteria should be viewed as minimum requirements for the use of waivers by Federal agencies.

- Nonavailability Waivers Before granting a nonavailability waiver, agencies will consider
 whether the recipient has performed thorough market research, and adequately considered,
 qualifying alternate items, products, or materials. Waivers will describe the market research
 activities and methods to identify domestically manufactured items capable of satisfying the
 requirement, including the timing of the research and conclusions reached on the availability
 of sources.
- Unreasonable Cost Waivers An unreasonable cost waiver is available if the inclusion of iron, steel, manufactured products, or construction materials produced in the United States will increase the cost of the overall project by more than 25 percent. The recipient must provide adequate documentation that no domestic alternatives are available within this cost parameter. For requests citing unreasonable cost as the statutory basis of the waiver, the waiver justification must include a comparison of the cost of the domestic product to the cost of the foreign product or a comparison of the overall cost of the project with domestic products to the overall cost of the project with foreign-origin products, pursuant to the requirements of the applicable Made in America law.
- Public Interest Waivers A waiver in the public interest may occur if a federal agency determines that other important policy goals cannot be achieved consistent with the Buy America requirements established by the Act and the proposed waiver would not meet the requirements for a nonavailability or unreasonable cost waiver. Such waivers will be used judiciously and construed to ensure the maximum utilization of goods, products, and materials produced in the United States. Determination of public interest waivers shall be made by the head of the agency with the authority over the Federal financial assistance award. Before granting a waiver in the public interest, federal agencies shall assess whether a significant portion of any cost advantage of a foreign-sourced product is the result of the use of dumped steel, iron, or manufactured products or the use of injuriously subsidized steel, iron, or manufactured products. Agencies may consult with the International Trade Administration (ITA) in making this assessment if the granting agency deems such consultation to be helpful. The agency shall integrate any findings from the assessment into its waiver determination as appropriate.
- 5.2.4 If a Contractor desires to pursue a waiver they shall notify the CDOT Project Engineer who will then submit it to the CDOT Materials & Geotechnical Services Unit, Pavement Design and Documentation Services Program at the following email address: CDOT_BuyAmerica@state.co.us. The Pavement Design and Documentation Services Program will review it and forward it to the FHWA Division Office for consideration. See Section 106.11(e) of the specifications for additional information related to the waiver process and Contractual obligations, delays, and claims.

5.3 GLASS BEADS for PAVEMENT MARKING

5.3.1 All post-consumer(recycled) and industrial produced glass beads for pavement marking shall have been manufactured or recycled from North American glass waste streams in the United States of America. The bead manufacturer/supplier shall submit a Certificate of Compliance (COC) in accordance with CDOT Standard Specifications Subsection 106.12 confirming that North American glass waste streams in the United States of America were used in the manufacture of the glass beads, and a Certified Test Report (CTR) for Glass Beads per CDOT Standard Specifications, Section 713.08, and Table 713-2.

6. QUALITY MANAGEMENT PLANS FOR THE QUALIFIED MANUFACTURERS LIST OR THE APPROVED PRODUCTS LIST

- 6.1 CP 11 specifies requirements and procedures for a certification system that shall apply to all referenced manufacturers, as well as suppliers and contractors within certain industries. Certifying a Manufacturer's Quality Management Plan is not an automatic acceptance of any particular product, but an acknowledgment that the Manufacturer has taken steps to ensure that their quality controls meet the applicable Industry standards. Manufacturers whose Quality Management Plans are acceptable will be placed on the Qualified Manufacturers List (QML). Only Manufacturers listed on the QML will be eligible to provide the referenced products to a CDOT project.
- The following Standard Manufactured Materials as referenced in CP 11 require the annual submission of a Quality Management Plan (QMP) along with a sample for evaluation. Materials and Geotechnical Branch/ Asphalt Program maintains the QMP for the Sub-Part 1, Asphalt Binder, and the Sub Part 2, Asphalt Emulsion. Contact them at: @state.co.us or 303-398-6576.

For the Sub-Part 3,4, and 5 the QMP will be managed by: eric.prieve@state.co.us or 303-398-6542.

- Part I, Standard Manufactured Materials Sub-Part 1. Asphalt Binder Sub-Part 2. Asphalt Emulsion
- Part I, Standard Manufactured Materials Sub-Part 3. Hydraulic Cement Sub-Part 4. Fly Ash Sub-Part 5. Hydrated Lime

These products are located on the APL. https://apps.coloradodot.info/apl/AplSearch.cfm

- 6.3 The following Fabricated Structural Materials as referenced in CP 11 are listed in the Qualified Manufacturers List (QML) and require the annual submission of a Quality Systems Manual (QSM).
 - Part II, Fabricated Structural Materials
 Sub-Part 1. Steel Reinforcing Bars & Steel Dowel Bars.
 Subject Matter Expert: eric.prieve@state.co.us or 303-398-6542
 https://www.codot.gov/content/apl/SteelReinforcingBarsAndSteelDowelBars.pdf
 - Sub-Part 2. Epoxy Coaters of Reinforcing Steel.
 Subject Matter Expert: melody.perkins@state.co.us or 303-398-6562

https://www.codot.gov/content/apl/EpoxyCoatingForReinforcingSteel.pdf

 Sub-Part 3. Precast Conc. Structures.
 Subject Matter Expert: <u>Hailey.goodale@state.co.us</u> or 303-398-6562 https://www.codot.gov/content/apl/PrecastConcreteStructures.pdf

The QML is located within CDOT's Approved Products List (APL) website, at: https://www.codot.gov/business/apl/qualified-manufacturers-list.html.

A Notice to Manufacturers is located within the same website that references specific evaluation protocols including AASHTO's National Transportation Product Evaluation Program (NTPEP).

6.4 The respective QML website pages are updated regularly. All pages will have at least one revision referencing acceptability for the new calendar year.

7. DESIGNATED PRODUCTS AND ASSEMBLIES

- 7.1 The majority of materials submitted for inclusion on CDOT projects will fall within one of four methods of product acceptance for their sampling and testing. CDOT always retains the right through its Owner Acceptance (OA) Program to obtain samples for additional testing and require supplemental documentation.
- 7.2 If the material or product is not referenced within the four methods of product acceptance then the materials or products must be fabricated or supplied per the requirements of the applicable Colorado Department of Transportation specifications, plans, and standards. An example of processed materials not found in the following four methods is Aggregate Base Course (ABC), Hot Mix Asphalt (HMA), and Concrete (PCCP). An example of a manufactured product treated uniquely is the Dynamic Message Signs (DMS) which are competitively bid on projects or through state awards.

7.3.a. PRE-INSPECTION (PI):

Pre-Inspection is when representatives from the Colorado Department of Transportation visit a manufacturer's facility to perform an initial review of the company's quality control plan and employee certifications, as well as subsequent inspection visitations during the manufacturing of the product. Inspection arrangements shall be made by contacting the CDOT Staff Bridge Fabrication and Construction Inspectors at: Mike Bean@state.co.us (303) 757-6751 a minimum of 10 days before the beginning of fabrication. Failure to give notice will result in delays to the project and/or rejection of materials or products.

Note 2: Bearing Devices and Expansion Devices are inspected randomly at the discretion of the Staff Bridge Fabrication Inspectors.

Products needing Pre-Inspection:

- Bearing Devices (Type III) Bridge^A
- Expansion Device, Modular Bridge^A (0-6", through, 0-24")
- Pre-stressed Concrete Units Bridge^A
- Structural Steel Bridge A
- Precast Concrete Deck Panels Bridge A

Note: A - Staff Bridge Fabrication Inspectors

CDOT Form 193 is to be provided with the above-referenced products.

7.3.b. CERTIFIED TEST REPORT (CTR):

The Certified Test Report method of acceptance is when a manufacturer is required to submit the actual test results performed on the material being provided. The word preceding the "Test Report" may vary between different industries, such as Certified, Mill, Metallurgical, Laboratory; however, they are all considered equivalent. The CTR shall contain the actual results of tests for the chemical analysis, heat treatment, and/or mechanical properties per the drawing and/or specification for the specific batch or lot of material delivered to the project.

The contract will designate products and assemblies that can be incorporated in the work if accompanied by Certified Test Reports.

CTR's shall meet the requirements listed in the CDOT Standard Specifications, Subsection 106.13. The Contractor shall certify the manufacturer's CTR as required by Subsection 106.13.

Note 3: A COC/CTR Cover letter has been approved for contractors using the same product for different ltem numbers during construction. Submit the cover letter with the Contractors original or electronic signature to include the Corporate Title. (See Example on page 26)

Each product or assembly delivered to the project must contain the lot, heat, or batch number identical to that on the accompanying Certified Test Report. Products or assemblies furnished based on Certified Test Reports may be sampled and tested by the Department and if determined that the material does not meet the applicable specifications, the material will be rejected or accepted according to CDOT Standard Specifications, Subsection 105.03. [An example of what is required on a CTR is included in this chapter.]

Products <u>requiring Certified Test Report (below is an incomplete list):</u>

- Bearing Devices (Type III) Bridge^A
- Bridge Deck Forms, Permanent Steel ^A
- Cribbing, Steel
- Geogrid (or COC, per project specs)
- Glass Beads (for pavement marking)
- Mechanical Fasteners (Field) ^A
- Overhead Sign Structures ^A
- Pedestrian & Bikeway Railing
- Quicklime
- Soil Conditioner
- Structural Plate Structures
- Topsoil
- Traffic Signal Structures ^A
- Water, Non-Potable
- Welded Wire Reinforcement

7.3.c. CERTIFICATE OF COMPLIANCE (COC):

The Certificate of Compliance method of acceptance is when a manufacturer is required_to submit a document certifying that the material being provided meets all required Department specifications. A COC shall reference the required specifications for the chemical analysis, heat treatment, or mechanical properties per the drawing or specification, but not the actual test results. The contract will designate products and assemblies that can be incorporated in the work if accompanied by Certificates of Compliance.

COC's shall meet the requirements listed in the CDOT Standard Specifications, Subsection 106.12. The Contractor shall certify the manufacturer's CTR as required by Subsection 106.12.

Note 4: A COC/CTR Cover letter has been approved for contractors using the same product for different Item numbers during construction. Submit the cover letter with the Contractors original or electronic signature to include the Corporate Title. (See Example on page 26)

(See Standards and Specifications Section 105.08 for electronic signature explanation.)

Each product or assembly delivered to the project must contain the lot, heat, or batch number identical to that on the accompanying Certificate of Compliance. Products or assemblies furnished based on Certificates of Compliance may be sampled and tested by the Department and if determined that the material does not meet the applicable specifications, the material will be rejected or accepted according to CDOT Standard Specifications, Subsection 105.03.

[An example of what is required on a COC is included in this chapter.]

Note 5: If the Plans do not specifically reference a Certified Test Report (Mill Test Report) and the product category is not listed on the Approved Products List within the Pre-Approved level of acceptance, then a COC will be required.

Products <u>requiring Certificate of Compliance (below is an incomplete list):</u>

- AEP (Asphalt Emulsion Prime)
- Aggregate Bag (for the bag, CTR for aggregate.)
- Bearing Devices (Type I, II AB)
- Bridge Rail, Steel ^A
- Catch Basin Insert
- Cattle Guard Boxes, Pre-Cast
- Concrete Box Culverts, Precast
- Damp proofing, Asphalt
- Delineator Posts, Steel
- Ditch Control (Erosion Log & Silt Dike)
- Dust Palliative, Asphaltic or Magnesium
- Chloride
- Erosion Bales D
- Expansion Joint Material, Preform. Filler
- Fence (Wires & Posts)
- Fertilizer
- Flumes (all types) Gabions and Slope Mattress
- Gaskets
- Geogrid (for Erosion Control)
- Glass Beads (for PMM)
- Guard Rail End Anchors
- Guard Rail Metal ^A
- Guard Rail Posts Metal ^A
- Guard Rail Precast
- Guard Rail Posts Timber Blocks and
- Posts ^A
- Hay D
- Headgates
- Hydraulic Soil Stabilizers
- Inlets, Grates, and Frames (Prefab)
- Interior Insulation
- Irrigation Systems
- Lighting, all items
- Light Standards, High Mast
- Light Standards, Metal
- Luminaires (Inclusive)
- Manholes, Rings, and Covers (Prefab)
- MSE Wall Elements A,C
- Mulch (Hydraulic or Dry Applied)
- Mulch Tackifier
- Pedestrian Bridge ^A
- Perimeter Control (Silt Fence)
- Piling ^A
- Pipes all material compositions
- Rest Area Materials (construction of)
- Retaining Wall Blocks
- Seeding (Native), Seed ^c

- Sign Panels
- Sprinkler System(s)
- Steel Chairs
- Steel Signposts
- Steel Sheet Piling ^A
- Storm Drain Inlet Protection
- Straw D
- Structural Glazed Tile and Ceramic Tile
- Structural Plate Structures ^A
- Structural Steel Galvanized A
- Treated Timber
- Vegetation (Sod & Plants)
- Water, Potable
- Water Control Devices
- Water Lines
- Welded Wire Mesh

Note 6:

- 1. Mill Test Report shall be included.
- 2. Certified Test Report(s) on components must accompany the material or product.
- **3.** Certified Test Report shall be included.
- **4.** The contractor may obtain a current list of Weed Free Forage Crop Producers by contacting the Colorado Department of Agriculture at (303) 239-4149

Examples of CTR stamps or affixed stickers to be placed on Certified Test Reports (CTRs) Electronic CTR (Stamp Instructions are located at the end of this chapter). As per CDOT PD 21.1 and CDOT PD 508.1

I hereby certify under penalty of perjury that trepresents	·
of pay item	
(Pay item # and description) that will be instal specifications on Project Number	·
Contractor Rep. Signature	 Date
NOTE: The Electronic Stamp must be filled out p	orior to importing to document.
·	s to be placed on Certificates of Compliance (COCs) at the end of this chapter. As per CDOT PD 21.1 and
I hereby certify under penalty of perjury that represents	the material listed in this Certificate of Compliance (quantity and units)
of pay item	

NOTE: The Electronic Stamp must be filled out prior to importing to document.

specifications on Project Number_____

Contractor Rep. Signature

(Pay item # and description) that will be installed in conformance with the plans and

Date

7.3.d. PRE-APPROVED (APL):

The Pre-Approved method of acceptance is when a manufacturer is required to submit all relevant documentation on their product in advance of any specific project. A primary requirement to be considered for the Approved Products List (APL) is that the material retains a very high level of uniformity and consistency in its production quality (i.e., not project-specific).

The submittal of Product literature /Tech Data Sheet (TDS), Certificates of Compliance, Certified Test Reports, Materials Safety Data Sheets (MSDS), etc., as well as product samples for specific categories, combine all previous methods of acceptance into one. A manufacturer whose product is not currently on the APL should read and follow the instructions within the Notice to Manufacturers on the APL website at https://www.codot.gov/business/apl

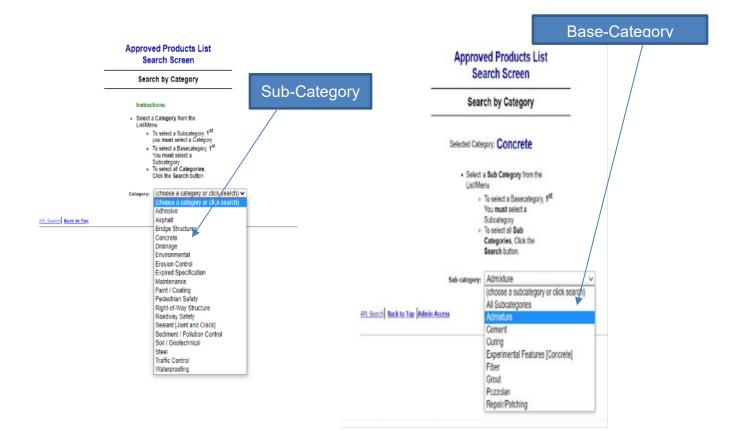
Product evaluations can take a minimum of four months to over two years for some product categories. If CDOT specifications need to be altered or created for a product's acceptance, then it could take even longer.

Per CDOT's Procedural Directive 1401.1, a manufacturer's product is evaluated within CDOT to determine its acceptability on CDOT construction projects, as defined by CDOT specifications, plans, and standards. For additional information on the APL or the website contact the Product Evaluation Coordinator within the Staff Materials & Geotechnical Branch at: edward.trujillo@state.co.us or 303-398-6566.

Locate products on the website at: https://www.codot.gov/business/apl then go to APL search, and then use the referenced Category, the Manufacturer's name, or the Product name.

A "category / Sub-Category / Base-Category" search requires that the drop-down menus be used.





APL User Guidance

- 1. If three or more products are listed for any applicable category, then one of these products shall be selected. If the category is unpopulated a Certificate of Compliance (COC) will be required for the product used. If the category is under-populated, a COC will be required for the product used if not from the APL. CDOT's Subject Matter Expert (SME) for the applicable category shall be contacted for assistance. A Certified Test Report (CTR) may be requested if the Project Engineer deems it appropriate. Contact the CDOT Product Evaluation Coordinator at: edward.trujillo@state.co.us or 303-398-6566 for a list of SMEs or assistance with any questions.
- 2. Products that are evaluated on a batch or lot basis and subsequently posted on the APL website will not be posted indefinitely. They expire two years after their CTR date, or they will be removed sooner if informed that the batch or lot is depleted. Specifically, this refers to (1) single component, hot-applied, elastomeric membranes for bridge decks, (2) hot poured, joint/crack sealant, and (3) asphalt plug joints. The Batch # or Lot # must be included in the CTR.
- 3. Asphalt Binder and Asphalt Emulsions: Approved asphalt binders and emulsions are <u>valid for the calendar year</u> in which they were tested and approved, as per CP 11. The year is incorporated into the product name. On February 1st of each calendar year, all products from two previous years will be automatically removed. CDOT Asphalt SME: 303-398-6576.
- 4. Environmental Erosion Control and Sediment / Pollution Control: All questions regarding this category's materials, both the current specifications and the products, should be directed to the CDOT Staff Environmental Branch SME: greg.fischer@state.co.us
- Traffic Control Pavement Marking Material Sub-Category: All questions regarding pavement marking materials, both the current specifications and the products, should be directed the CDOT Staff Traffic Branch SME: esayas.butta@state.co.us

6. Geosynthetics and Geotextiles:

CDOT Materials and Geotechnical SME: david.thomas@state.co.us https://www.codot.gov/business/designsupport/materials-and-geotechnical/materials-bulletins/Materials%20Bulletin%202008%20No%201.pdf/view

This Materials Bulletin clarifies the terminology and application of geosynthetics as specified in the Standard Specifications and the Standard Special Provision (SSP), *Revision of Sections 208, 420, 605, and 712 – Geosynthetics and Geotextiles.*

Only geotextiles on the New York DOT's Approved Products List (NY APL) may be used on CDOT projects.

The web address for the NY APL is:

https://www.dot.ny.gov/divisions/engineering/technical-services/technical-services-repository/alme/pages/470-1a.html

Or follow the New York State website navigation process you can refer to (NYDOT APL Instructions) at www.dot.ny.gov/index?nd=nysdot. (See Item 420 on the OA Schedule for instructions should the direct link be broken.)

Note 7: If a proposed geotextile product is not on the NY APL, the manufacturer will need to contact NYDOT and submit samples for testing and approval before use on a CDOT project. All geotextiles shall conform to AASHTO M 288; the tables in Subsection 712.08 of the Standard Specifications. The following have been deleted in the CDOT Standard Provision (SSP), *Revision of Sections 208, 420, 605, and 712 – Geosynthetics and Geotextiles*.

7. Concrete Mix Designs:

The APL website https://www.codot.gov/business/apl/concrete-mix-designs contains a folder listing concrete mix designs that have been pre-approved. When a concrete mix is placed on the APL, it meets the most current CDOT Standard Specifications; however, it may not meet a CDOT project's Special Provisions. CP 62 is the procedure for approving all concrete mixes for use on a CDOT project. (Review FMM Chapter 600). Contact dot_concretemixdesigns@state.co.us for further information.

8. Warm Mix Asphalt (WMA) Mixes:

The APL website contains a folder listing approved WMA technologies and a folder listing approved contractors for specific WMA technologies that have been pre-approved for use on CDOT Projects. Use of a WMA mix on a Project shall be approved by the Project Engineer with the concurrence of the Region Materials Engineer. Warm Mix Asphalt SME: 303-398-6576

9. Contractors are required to submit a document entitled Contractor's APL Verification along with a copy of the CDOT Form 595 to the project engineer documenting the selection of the CDOT APL products that they wish to include for project incorporation. (Example included in this chapter.)

- 10. APL Quality Assurance Program: Upon selecting the sub-category or base category the Product Identification Number (PID), Product Name, Manufacturer, and Comments will be displayed.
 - A. By clicking on the PID / CDOT Form 595 the Pre-Approved Product Evaluation Request & Summary will be displayed. This will provide the customer with both a mini product data sheet and the information necessary for additional product analysis for specific utilization.
 - B. If a product fails to perform within minimum quality expectations contact the CDOT Product Evaluation Coordinator edward.trujillo@state.co.us or 303-398-6566, immediately via e-mail also listed on the APL website.

DISCLAIMER: The Colorado Department of Transportation (CDOT) is not obligated to any manufacturer to use any of their products listed in the Approved Products List (APL). The APL simply documents that the listed products have been reviewed, tested, and evaluated against CDOT standards, and were found to be acceptable to be used in CDOT projects. Acceptance is based on product quality; however, price or availability may be the determining factor by a contractor or sub-contractor on the CDOT project.

The product shall be removed from the APL if Product Performance comments indicate that field performance is unacceptable to CDOT quality standards or if the product varies from the data as originally submitted. Additional disclaimer information can be found on the APL website.

APL Categories

Note 7: Adhesives are no longer listed in the APL. They will be used on a project-by-project approval basis only. Contact Staff Bridge Subject Matter Expert or the Product Evaluation Coordinator for further information: edward.trujillo@state.co.us

Note 8: Maintenance\Alternate Traction Devices: House Bill 19-1207 CRS 42-4-106 (5)(a) (I) (F) 2 CCR 601-14 Rules Governing Chain Law and Passenger Vehicle Traction Law Requirements on the State Highways. Contact the Maintenance Staff Engineer for further information: james.fox@state.co.us

https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=8590&fileName=2%20CCR%20601-14

Note 9: Sealant\Mastic\Black for Asphalt/ Grey for Concrete used for Bridge Construction will be on the CDOT APL for further information contact: edward.trujillo@state.co.us. The Maintenance requirement for the Sealant must meet the required ASTM D8260 specifications, for further information contact: james.fox@state.co.us.

Note 10: Traffic Control\Reflective Element\Delineator Post Marker will not be listed in the APL Staff Traffic is moving to replace the product with the Flexible Post Reflector. The project can continue to purchase the Delineator Post Marker (Reflector) as a Project Special only. For further information contact: edward.trujillo@state.co.us or esayas.butta@state.co.us

Note 11: Sound Barrier Wall: Acceptance Method: Project by Project approval only. The Contractor shall provide the Engineer with one copy of <u>Certified Test Reports</u> (furnished by the supplier) to validate the structural values required of the wall. Field-inspect and document on CDOT Form 157 that the material is acceptable, then retain all copies in the Project Files. Contact the Staff Bridge SME: <u>Andy Pott@state.co.us</u> for the structure requirements. Contact the Standards and Specifications SME <u>David.kosmiski@state.co.us</u> for the MASH 09 testing requirements. Contact the Air Quality and Noise Program Manager SME <u>rose.waldman@state.co.us</u> for the acoustic qualities' guidance.

Note 10: Concrete\Grout\Post Tensioned: Project by Project approval only. This product is no longer on the CDOT Approved Products List. Contact Concrete Program Manager SME eric.prieve@state.co.us

APL Category List

APL Category	APL Sub-Category	APL Base Category	Material Code
Adhesive:	Anchoring, Lateral:	Acrylic	See Note 7
		Cementitious	See Note 7
		Ероху	See Note 7
		Polyester	See Note 7
	Anchoring, overhead:	N/A	See Note 7
	Bonding:	Ероху	See Note 7
APL Category	APL Sub-Category	APL Base Category	Material Code
Asphalt:	Asphalt Release Agent:	Truck Bed Only	401.09.01.00
		Truck & Equipment	401.09.01.00
	Binder:	PG 58-28	702.01.01.01
		PG 58-34	702.01.01.02
		PG 64-22	702.01.01.03
		PG 64-28	702.01.01.04
		PG 70-28	702.01.01.05
		PG 76-28	702.01.01.06
	Emulsion:	CSS-1	702.03.18.00
		CSS-1h	702.03.19.00
		CRS-2	702.03.15.00
		CRS-2P	702.03.21.00
		CRS-2R	702.03.23.00
		CQS-1h	702.03.20.00
		HFMS-2	702.03.08.00
		HFMS-2s	702.03.10.00
		HFMS-2P	702.03.25.00
		HFMS-2sP	702.03.26.00
		HFMS-2h	702.03.09.00
		HFRS-2P	702.03.24.00
		SS-1	702.03.11.00
		SS-1h	702.03.12.00
		ARA-1P	702.04.02.00
	Hydrated Lime:	N/A	712.03.01.00
	Roadway Patching:	Pre-Mixed [Bagged]	401.02.01.00
	o-Category APL Ba	se Category	Material Code
Bridge Structures:	Geo-composite Drain:	N/A	712.12.01.00
	Thin Bonded Overlay:	Ероху	Project-by-Project Approval
		Non-Epoxy	Project-by-Project Approval
	Structural Wrapping Repair	N/A	Project-by-Project Approval

APL Category Concrete:	APL Sub-Category Admixture: Curing Compound: Cement:	APL Base Category Admixture categories Curing Compound Categories Portland Cement, ASTM C 150 Blended Cement, ASTM C 595 Blended Cement [Type IL] [MS] Blended Cement [Type IL] [HS] Blended Cement [Type IT] [MS] Blended Cement [Type IT] [HS] Slag Cement / Slag Grade 100	Material Code 711.02.01.00 711.01.01.00 701.01.02.00 701.01.02.00 701.01.02.06 701.01.02.07 701.01.02.08 701.01.02.09 701.05.01.01
	Pozzolan:	Slag Cement / Slag Grade 120 Fly Ash, Class C Fly Ash, Class F High Reactivity Silica Fume	701.05.01.02 701.02.01.00 701.02.02.00 701.02.04.00 701.03.01.00
APL Category	APL Sub-Category	APL Base Category	Material Code
Concrete:	Fiber:	Macro Fiber	709.04.02.00
		Microfiber	709.04.02.00
	Grout:	General Purpose [Non-Shrink]	601.02.14.00
		Post-Tensioned Cable	See Note 10
		PCCP Grout	618.09.00.00
	Region Approved	Plant Mix Grout	618.02.14.01
Concrete:	Tie Bar Anchorage	PCCP Tie Bar Epoxy	412.13.00.00
	Repair/Patching:	Rapid Set, Horizontal	601.09.01.00
	, , ,	Rapid Set, Vertical & Overhead	601.09.01.00
		Bonding Agent	601.09.01.00
		Class DR [Pre-Packaged]	618.08.00.00
A.D.I. G. I	ADLC C	ADI D	
APL Category	APL Sub-Category	APL Base Category	Material Code
Drainage:	Culvert Pipe:	Culvert Lining [Repair]	707.12.01.00
	Manholes & Inlets:	Open-Cut/Direct-Bury Manhole Riser	712.13.02.00
	Mannoles & Inlets:	Trench Drain	604.04.01.00 712.14.01.00
		Plastic Drains	712.14.01.00
			712.14.01.00
APL Category	APL Sub-Category	APL Base Category	Material Code
Environmental:	Sound Wall:	Absorptive	See Note 9
		Reflective	See Note 9
Erosion Control:	Soil Retention Rolled:	SRB [Biodegradable Class 1]	216.02.02.00
		SRB [Photodegradable Class 1]	216.02.02.00
		SRB [Biodegradable Class 2]	216.02.02.00
		SRB [Photodegradable Class 2]	216.02.02.00
Erosion Control:	Soil Retention Rolled:	TRM [Class1]	216.02.03.00
		TRM [Class 2]	216.02.03.00
		TRM [Class 3]	216.02.03.00
		TRM [Class 4 / woven]	216.02.03.00
Erosion Control:	Ditch Control:	Silt Berm	208.02.02.00
Sediment/Pollution Ctrl:	Construction Inlet Protect.:	Storm Drain Inlet Protect. (Type 1)	208.02.08.01
		Storm Drain Inlet Protect. (Type 2)	208.02.08.01
0 11 1/0 11 11 5 1		Storm Drain Inlet Protect. (Type 3)	208.02.08.01
Sediment/Pollution Ctrl:	Concrete Washout Structure:		208.02.14.00
Sediment/Pollution Ctrl:	Vehicle Tracking Control:	Prefabricated 	208.02.15.01

APL Category Maintenance Maintenance	APL Sub-Category Deicing, Liquid Deicing, Granular	APL Base Category Magnesium Chloride (Cat. 1) Brining Salt, Dry, Std (Cat. 8A-B) Road Salt, Dry, Std (Cat. 8A-R) Wet Salt, Std (Cat. 8B) Brining Salt, Dry, Fine (Cat. 8C) Road Salt, Dry, Fine (Cat. 8C-R)	Material Code 712.04.01.00 712.04.02.00 712.04.02.00 712.04.02.00 712.04.02.00 712.04.02.00	
Maintenance Inhibite	or / Enhancer	Corrosion Inhib, NaCl (Cat. A-1) Corrosion Inhib, NaCl (Cat. A-3)	712.04.02.01 712.04.02.01	
Maintenance Alterna	ate Traction Device	Chain Cable Chain	712.15.00.00 712.15.00.00	
APL Category	<u>APL Sub-Category</u>	APL Base Category	Material Code	
Paint / Coating:	Anti-Graffiti:	N/A	708.02.01.00	
	Concrete Corrosion Inhibitor:	N/A	708.08.01.00	
	Epoxy Coating: N/A		708.03.03.00	
	Structural Concrete Coating:	N/A	708.08.01.00	
	Structural Steel Paint:	N/A	708.03.02.00	
	Wire Coating:	N/A		
Pedestrian Safety:	ADA Truncated Dome:	Embedded	608.02.03.00	
		Retrofit	608.02.03.00	
	Joint System	N/A	705.01.03.00	
Right-of-Way Structure:	Mailbox Support System:	N/A	210.13.01,00	
	Utility Enclosure:	N/A	604.04.02.00	
	Fence, Non-Standard Coating	N/A	710.03.01.00	
	Pole Base Hardware:	N/A	713.05.01.00	
APL Category	APL Sub-Category	APL Base Category	Material Code	
Roadway Safety:	Cable Barrier:	MASH 2016 TL-3	606.02.06.00	
		MASH 2016 TL-4	606.02.06.00	
	Guardrail W-Beam:	Guardrail End Treatment	606.02.03.00	
		Guardrail End Treat., Spec. App.	606.02.03.00	
		Guardrail Synthetic Block-out	606.02.04.00	
	Crash Cushion:	Sand Barrel Array	614.07.02.00	
		Guardrail Median Terminal	606.02.02.00	
		Barrier End Treatment (Terminal)	606.02.02.00	
		Impact Attenuator, Std. Perm.	614.07.02.00	
		Impact Attenuator, Wide, Perm.	614.07.02.00	
		Impact Atten., Lo-Maint., Perm.	614.07.02.00	
		Impact Atten., Spec-App, Perm.	614.07.02.00	
Roadway Safety:	Railing	Pedestrian & Bicycle	514.05.01.00	
		Vehicle 	606.02.05.00	
Sealant [Joint & Crack]:	Asphaltic Plug Joint:	N/A	518.03.01.00	
	Hot Poured, Joint/Crack:	ASTM D 6690, Type II	702.06.01.00	
		ASTM D 6690, Type IV	702.06.02.00	
		ASTM D 5078	702.06.03.00	
	Mastic:	Black for Asphalt	702.06.04.00	
		Grey for Concrete	702.06.04.01	

APL Category Sealant [Joint & Crack]:	APL Sub-Category Silicone, Joint:	APL Base Category Non-Sag Self-Leveling	Material Code 705.01.01.00 705.01.01.00
	Pre-Formed Joint Filler:	N/A	705.01.02.00
	Loop Detector Slot:	One Component	705.01.01.00
		Two Component	705.01.01.00
Soil / Geotechnical:	Stabilization:	Chemical, Liquid	308.03.02.01
	Void Elimination:	Polyurethane Foam, Hi Density	308.03.02.01
APL Category	APL Sub-Category	APL Base Category	Material Code
Traffic Control:	Portable Changeable Message:	Trailer Mount	630.03.01.00
		Vehicle Mount	630.03.01.00
	Arrow Board:	Type A	630.03.01.00
		Туре В	630.03.01.00
		Type C	630.03.01.00
		Type D	630.03.01.00
	Speed Notification:	Radar/Message Trailer	630.03.01.00
		Speed Display Trailer	630.03.01.00
		Speed Display Device	630.03.01.00
	Traffic Control Enhancement:	AFAD	630.04.01.00
		Flashing Beacon	614.06.01.00
		Warning Light	630.08.02.00
		Raised Island, Temporary	630.08.02.00
		Rumble Strip, Temporary	630.08.02.00
		Glare Screen	630.08.01.00
	Channelizing Device:	Cone	630.05.01.00
		Tubular Marker	630.05.02.00
		Vertical Panel	630.06.01.00
		Drum	630.06.02.00
		Barricade, Type 1	630.06.02.00
		Barricade, Type 2 Barricade, Type 3	630.06.02.00 630.06.02.00
APL Category	APL Sub-Category	APL Base Category	Material Code
Traffic Control	Channelizing Device:	Direction Indicator Barricade	630.02.02.00
		Longitudinal Channelizing Device	630.06.04.00
	Delinestan	Opposing Traffic Lane Divider	630.06.03.00
	Delineator:	Flexible Post	612.02.02.00
		Flexible, Multiple Hit Post Guardrail Mount	612.02.02.00
	Reflective Element:	Barrier (Solid Wall) Marker	612.02.02.00
	Reflective Element.	Guardrail & Post Marker	612.02.04.00 612.02.04.00
		Delineator Post Marker	See Note 8
		Linear Reflector Strip	612.02.05.00
	Post Anchoring:	Mechanical System	612.05.01.00
	1 03t Alleholling.	Polyurethane Foam, Backfill	614.02.03.00
	Traffic Barrier, Temporary:	Barrier, Non-Concrete	630.07.01.00
	Traine barrier, remporary.	Barrier Gate	630.07.01.00
		Concrete Pre-Cast Barrier [Type 7]	630.08.00.00
	Crash Cushion, Temporary:	Impact Attenuator, Temporary	630.08.04.00
	crash cashion, remporary.	Truck Mounted Attenuator (TMA)	630.08.03.00
		Trailer Mounted Attenuator	630.08.03.00

APL Category Traffic Control: Traffic Control: Traffic Control:	APL Sub-Category Sign Stand: Pave. Marking Material: Lighting / Light Standards	APL Base Category N/A Preformed Plastic Tape, Type I, Perm. Preformed Plastic Tape, Type II, Perm. Preformed Plastic Tape, Type III Perm. Thermoplastic, Hot Applied Thermoplastic, Preformed, No-Preheat Thermoplastic, Preformed, Preheat Epoxy Paint, Standard Epoxy Paint, Modified Waterborne Waterborne Waterborne, Hi-Build Polyurea, Paint Methyl Methacrylate Recessed Pavement Marker Raised Flexible Marker (Temp.) 7 Temp. / Construction, Tape Temp. / Construction, Paint Conduit, Pull boxes, misc. wiring Items	Material Code 630.02.01.00 713.13.01.00 713.13.01.00 713.13.01.00 713.12.01.00 713.14.01.00 713.14.01.01 713.17.01.01 713.17.01.02 708.05.02.00 708.05.03.00 713.19.01.00 713.18.02.00 13.18.01.00 713.16.01.00 713.16.02.00 613.02.00.00
APL Category Traffic Control:	APL Sub-Category Sign Sheeting:	APL Base Category ASTM D4956, Type IV ASTM D 4956, Type VI ASTM D 4956, Type VI [Roll-up & Cone Collar] ASTM D 4956, Type VIII ASTM D 4956, Type VIIII, Fluorescent ASTM D 4956, Type IX ASTM D 4956, Type IX ASTM D 4956, Type IX, Fluorescent ASTM D 4956, Type XI ASTM D 4956, Type XI, Fluorescent Films / Miscellaneous	Material Code 713.04.01.00 713.04.01.00 713.04.01.00 713.04.01.00 713.04.01.00 713.04.01.00 713.04.01.00 713.04.01.00 713.04.01.00 713.04.01.00 713.04.01.00 713.04.01.00
APL Category Waterproofing:	APL Sub-Category Concrete Sealer: Elastomeric Membrane:	APL Base Category Alkyl-alkoxy Silane Non-Alkyl-alkoxy Silane Penetrating Epoxy Micro-Subsurface Repair Single Component, Hot Applied Non-Asphaltic	Material Code 515.03.01.00 515.03.01.00 515.03.01.00 515.03.01.00 705.09.01.00 705.08.01.00

Example Letters, Notices, and Forms Sample Buy America Certification

The specification requires the Contractor to certify that he has obtained all the correct certifications from the manufacturers and suppliers and maintain the certifications on file at the project. These Buy America certifications are to be received and approved by CDOT before the materials are incorporated into the project. Once the Contractor receives the Buy America certification from manufacturers and suppliers, the Contractor shall provide CDOT with a Buy America certification such as the example below. CDOT does not accept blanket Buy America letters covering all materials.



Kryptonite Construction Inc. 13369 W. Rocky Rd. Smallville, Colorado 91130 Phone 999-123-4567

Attn: Project Engineer Date: August 3, 2022

Re: CDOT Contract ID: 53124 Re: CDOT Project No. CC 00-0000-00

Subject: Buy America Certification & Exception for Foreign Steel

Kryptonite Construction hereby certifies that during the month of July 2018 the materials and quantities represented below, to be incorporated into the project, meet the contract Buy America requirements. We also certify that the Buy America Documents and certifications required by Section 106.11 are on file at the project.

1.) 550 LF of 24" culvert pipe for bid item 603-01180

Minor Exceptions: ____ Yes __X_ No

A value less than 1/10 of 1% of the total contract cost or \$ 2,500.00 whichever is greater.

Documentation is in our Project Files.

Respectfully,

Clark Kent

Clark Kent
Construction Manager
Kryptonite Construction Inc.

EXAMPLE

Buy America Requirements

(Per requirements of Subsection 4.1)
(Original Signatures Required, No Facsimiles Accepted)

Note 1: The Buy America Certification is to always be received by the Project Engineer before the steel or iron being incorporated into the project.

Note 2: The delivery date and/or the incorporation date may be included in the letter.

This example depicts what is to be provided for each delivery.

Sample Summary of Buy America Quantities

This is a suggested format for the reconciliation of the Buy America Certification quantities with Installed Quantities. The Contractor shall submit this summary monthly to the Project Engineer for material incorporated during the previous month. The Project Engineer will verify the information in the Summary and all Buy America certifications provided by the Contractor. Before approving a progress payment, the Resident Engineer will verify that the quantities in the Contractor's summary document match the quantities in the progress payment.



Kryptonite Construction Inc.

Summary of Buy America Certifications Received for Installed Steel / Iron Products

CDOT Contract ID:

CC000-000-00

CDOT Contract ID:

53124

Summary for the Period Ending:

July 2018

				Quantity			BUY AMERICA				BUY AMERICA
				Delivered to		Delivered	CERTIFICATION	Installed		Installation	CERTIFICATION
	Item	Item Description	Delivery Date	Project	Unit	Cost *	Quantity	Quantity	Unit	Month	Date
	603-01180	24" culvert pipe	11-Jul-18	550	LF		550	300	LF	July	9-Jul-18
							550	250	LF	August	9-Jul-18
Total	603-01180	24" culvert pipe		550	LF			550	LF		

Prepared by:	Title:	Date:

EXAMPLE

Suggested format for the reconciliation of the Buy America Certification quantities with Installed Quantities. The Contractor shall submit this summary to the Project Engineer.

Subsection 4.1.G "The Contractor shall maintain a document summarizing the date and quantity of the material utilizing CDOT Item Number(s) and Item Description(s) delivered to the project, along with the quantity of material installed during the month."

CLARIFICATION: This summary example indicates that the Period Ended in October. The Buy America Certification date is from July 9th and the Delivery Date is from July 11th. This example document summarizes the quantity delivered along with the quantity installed.

Note: This example depicts what is to be provided monthly summarizing delivery and installation.

^{*} If there is any foreign steel or iron permanently incorporated into the project the Contractor shall provide documentation of the project delivered cost of that foreign steel or iron.

Sample Buy America Certification with Exceptions

The specification requires the Contractor to document the project delivered costs of any foreign steel or iron permanently incorporated into the project. This is an example of the requirement. An electronic signature or original signature can be submitted to the CDOT project.



Kryptonite Construction Inc. 13369 W. Rocky Rd. Smallville, Colorado 91130 Phone 999-123-4567

Attn: Project Engineer Date: October 4, 2022

Re: CDOT Contract ID: 53124

Re: CDOT Project No. CC 00-0000-00

Subject: Buy America Certification & Exception for Foreign Steel

Kryptonite Construction hereby certifies that during the month of September 2018 the materials and quantities represented below, to be incorporated into the project, meet the contract Buy America requirements. We also certify that the Buy America Documents and certifications required by Section 106.11 are on file at the project.

1.) 150 LF of 24" culvert pipe for bid item 603-01180

Minor Exceptions: X Yes X No A value less than 1/10 of 1% of the total contract cost or \$ 2,500.00 whichever is greater. Documentation is in our Project Files.

1.) 16 panels of ADA Truncated Domes which were imported from China were incorporated into the project. The total contract cost to date of imported steel or iron is \$1,831.66.

Respectfully,

Clark Kent

Clark Kent
Construction Manager
Kryptonite Construction Inc.

EXAMPLE

Buy America Requirements

(Per requirements of Subsection 4.1)
(Original Signatures Required, No Facsimiles Accepted)



Kryptonite Construction Inc.

Summary of Buy America Certifications Received for Installed Steel / Iron Products

CDOT Project No.:

CC000-000-00

53124

CDOT Contract ID:

Summary for the Period Ending:

September 2018

			Quantity			BUY AMERICA				BUY AMERICA
	1		Delivered to		Delivered	CERTIFICATION	Installed		Installation	CERTIFICATION
Item	Item Description	Delivery Date	Project	Unit	Cost *	Quantity	Quantity	Unit	Month	Date
603-01180	24" culvert pipe	25-Sep-18	150	LF		150	150	LF	September	21-Sep-18
608.02.03.00	ADA Trunc Dome, 2x3	27-Sep-18	16	EA		0	16	EA	September	

Prepared by:	litle:	Date:	

EXAMPLE

Suggested format for the reconciliation of the Buy America Certification quantities with Installed Quantities. The Contractor shall submit this summary to the Project Engineer.

Subsection 4.1.G "The Contractor shall maintain a document summarizing the date and quantity of the material utilizing CDOT Item Number(s) and Item Description(s) delivered to the project, along with the quantity of material installed during the month."

CLARIFICATION: This summary example indicates that the Period Ended in September. A Buy America Certification was not provided for the embedded type ADA Truncated Dome panels of a dimension of 2' x 3' each. This summary example correlates to the Buy America Certification & Exception for Foreign Steel document on the preceding page.

^{*} If there is any foreign steel or iron permanently incorporated into the project the Contractor shall provide documentation of the project delivered cost of that foreign steel or iron.

Example of the CDOT Form 1600 Buy America Contractors COC for Construction Materials and Manufactured Products Page 1.

NHRP 0241-099

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACTOR'S CERTIFICATION OF COMPLIANCE FOR CONSTRUCTION MATERIALS & MANUFACTURED PRODUCTS

FOR COMPLIANCE WITH THE "INFRASTRUCTURE AND INVESTMENT JOBS ACT" AND COOT SPECIFICATION "REVISION OF 106.11 – BUY AMERICA REQUIREMENTS"

12345

	10000			Page of						
Project location	SH 81 and COLOF	RADO BLVD								
Contractor name	Stark Construction	, Inc.		Date	October 31, 2022					
Item Description	CDOT Bld Item #	Manufacturer Name	Identifier (Lot #, Batch #, Order #, etc.)	Date Received	Qty Received	Date Installed	Qty Installed	Unit		
22 Inch Plastic Pipe	603-50022	SHIELD	RAS-5409	10/7/22	1,400	10/10/22	1,400	LF		
1-1/4 Inch HDPE Conduit	613-00025	Howard, LLC.	1069A	10/12/22	90	10/13/22	84	LF		
Light Standard Timber (30')	613-33300	Universal Industries	412-987G	10/15/22	75	10/18/22	63	EA		
				/ ~						
				•						
			Θ .							
		10								
	X	,								
Remarks:										
All Items and quantities lister	d above represent a	l materials eligible for Bu	y America requiremen	its that were de	ivered and insta	alled in the mo	onth of Octobe	er 2022.		
Manufacturer certification:			100 200	181						
I CERTIFY UNDER PENAL CONSTRUCTION MATERIC CONSTRUCTION OF THE UNITED STATES OF AMEI – Nov. 15, 2021)	ALS AND MANUFAC ABOVE-REFERENC RICA AS DEFINED B	TURED PRODUCTS FUI ED PROJECT THAT ARE BY §70912 DEFINITIONS	RNISHED TO THE CO ENOT OTHERWISE D OF THE INFRASTRUC	LORADO DEPA EFINED AS "ST TURE AND INV	RTMENT OF TR EEL OR IRON' ESTMENT JOB	ANSPORTAT HAVE BEEN I S ACT (IIJA).	TON FOR THE PRODUCED I	IN THE		
Contractor Representative Signature	Anthony Sto	zolo		Date	10/31/2022					

CDOT Form 1600

Page 2 of 5

Example of the CDOT Form 1600 Buy America Contractors COC for Construction Materials and Manufactured Products Page 2.

NHRP 0241-099

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACTOR'S CERTIFICATION OF COMPLIANCE FOR CONSTRUCTION MATERIALS & MANUFACTURED PRODUCTS

FOR COMPLIANCE WITH THE "INFRASTRUCTURE AND INVESTMENT JOBS ACT" AND COOT SPECIFICATION "REVISION OF 106.11 – BUY AMERICA REQUIREMENTS"

12345

Contract ID

Contractor Representation

Anthony Stark

Contractor name	Stark Construction,	Date	November 30, 2022					
	Cuin Constanting	Date						
	CDOT Bid Item #	Manufacturer Name	Identifier (Lot #, Batch #, Order #, etc.)	Date Received	Qty Received	Date Installed	Qty Installed	Ur
36 Inch Plastic Pipe	603-50036	SHIELD	RAS-6104	11/10/22	4,125	11/14/22	1,400	L
I-1/4 Inch HDPE Conduit	613-00025	Howard, LLC.	1072A	11/12/22	109	11/13/22	105	L
Electrical Conduit, Plastic	613-01200	Howard, LLC.	1072C	11/15/22	215	11/24/22	212	L
Plastic Pipe Sewer (PVC)	604-83108	Flowfirst Inc.	64972	11/21/22	645	11/23/22	645	1
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	X							
emarks:		AND REAL PROPERTY.						
Items and quantities lister 22.	d above represent all	materials eligible for Bi	uy America requiremen	ts that were de	livered and inst	alled in the mo	nth of Noven	nber
anufacturer certification:					- 11			
CERTIFY UNDER PENAL CONSTRUCTION MATERI CONSTRUCTION OF THE	ALS AND MANUFAC	TURED PRODUCTS FU	RNISHED TO THE COL	LORADO DEPA	RTMENT OF TH	RANSPORTAT	ION FOR THE	

CDOT Form 1600

11/30/2022

Example of the CDOT Form 1600 Buy America Contractors COC for Construction Materials and Manufactured Products Page 3.

Project number NHRP 0241-099

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACTOR'S CERTIFICATION OF COMPLIANCE FOR CONSTRUCTION MATERIALS & MANUFACTURED PRODUCTS

FOR COMPLIANCE WITH THE "INFRASTRUCTURE AND INVESTMENT JOBS ACT" AND CDOT SPECIFICATION "REVISION OF 106.11 – BUY AMERICA REQUIREMENTS"

Project location	SH 81 and COLORADO BLVD								
Contractor name	Stark Construction	Date	December 30, 2022						
	CDOT Bid Item #	Manufacturer Name	Identifier (Lot #, Batch #, Order #, etc.)	Date Received	Qty Received	Date Installed	Qty Installed	Uni	
36 Inch Plastic Pipe	603-50036	SHIELD	RAS-6104	12/10/22	4,125	12/14/22	1,400	LF	
22 Inch Plastic Pipe	603-50022	SHIELD	RAS-5472	12/10/22	2,105	12/16/22	19,080	LF	
Ight Standard Timber (30')	613-33300	Universal Industries	412-611D	12/15/22	22	12/20/22	22	EA	
1-1/4 Inch HDPE Conduit	613-00025	Howard, LLC.	1413B	12/20/22	54	12/23/22	60 °	LF	
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			1						
		- 0	7						
		1							
emarks:									
All Items and quantities liste 1022. (60 LF) of the 1-1/4 Inch H		1.5					month of Dec	embe	
Ianufacturer certification: I CERTIFY UNDER PENAL CONSTRUCTION MATERI. CONSTRUCTION OF THE UNITED STATES OF AMEI - Nov. 15, 2021) I further certify that all suj	ALS AND MANUFAC ABOVE-REFERENC RICA AS DEFINED B	TURED PRODUCTS FUR ED PROJECT THAT ARE Y §70912 DEFINITIONS	RNISHED TO THE COL ENOT OTHERWISE DI OF THE INFRASTRUC	LORADO DEPA EFINED AS "ST TURE AND INV	RTMENT OF TR EEL OR IRON? ESTMENT JOB	RANSPORTAT HAVE BEEN S ACT (IIJA).	ION FOR THE PRODUCED I	N TH	
ontractor Representative	Anthony Sto	,		Date	12/30/2022				

Page 4 of 5

Example of the CDOT Form 1600 Buy America Contractors COC for Construction Materials and Manufactured Products Page 4.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACTOR'S CERTIFICATION OF COMPLIANCE FOR CONSTRUCTION MATERIALS & MANUFACTURED PRODUCTS

FOR COMPLIANCE WITH THE "INFRASTRUCTURE AND INVESTMENT JOBS ACT" AND CDOT SPECIFICATION "REVISION OF 106.11 – BUY AMERICA REQUIREMENTS"

12345

SH 81 and COLORADO BLVD

Contract ID

NHRP 0241-099

Contractor name	Stark Construction,	Date	January 30, 2023					
Item Description	CDOT Bid Item #	Manufacturer Name	identifier (Lot #, Batch #, Order #, etc.)	Date Received	Qty Received	Date Installed	Qty Installed	Ur
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	-		1/1					
		- (7						
		+						
emarks:								
io materials eligible for Bi	uy America requirement	s were delivered or ins	talled in the month of .	lanuary 2023.				
lanufacturer certification:								
I CERTIFY UNDER PENA CONSTRUCTION MATEI CONSTRUCTION OF TH UNITED STATES OF AM - Nov. 15, 2021) I further certify that all 8	RIALS AND MANUFACT E ABOVE-REFERENCE ERICA AS DEFINED BY	URED PRODUCTS FU D PROJECT THAT AR \$70912 DEFINITIONS	RNISHED TO THE CO E NOT OTHERWISE D OF THE INFRASTRUC	LORADO DEPA EFINED AS "ST TURE AND INV	RTMENT OF TR TEEL OR IRON? TESTMENT JOB	RANSPORTAT HAVE BEEN S ACT (IIJA).	ION FOR THE PRODUCED I	N TH
ontractor Representativ	Inthony Stee			Date	1/30/2023			

CDOT Form 1600

Example of the CDOT Form 1600 Buy America Contractors COC for Construction Materials and Manufactured Products Page 5.

COLORADO DEPARTMENT OF TRANSPORTATION CONTRACTOR'S CERTIFICATION OF COMPLIANCE FOR CONSTRUCTION MATERIALS & MANUFACTURED PRODUCTS

FOR COMPLIANCE WITH THE "INFRASTRUCTURE AND INVESTMENT JOBS ACT" AND CDOT SPECIFICATION "REVISION OF 106.11 – BUY AMERICA REQUIREMENTS" $\frac{1}{2} \frac{1}{2} \frac{1$

12345

SH 81 and COLORADO BLVD

Contract ID

Project location

Contractor name	Stark Construction,			Date	February, 202			
Item Description	CDOT Bld Item #	Manufacturer Name	identifier (Lot #, Batch #, Order #, etc.)	Date Received	Qty Received	Date Installed	Orty Installed	Uni
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		1	5					
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emarks: o materials eligible for B anufacturer certification: I CERTIFY UNDER PEN- CONSTRUCTION MATE CONSTRUCTION MATE	ALTY OF PERJURY IN T RIALS AND MANUFACT E ABOVE-REFERENCE	THE SECOND DEGREE TURED PRODUCTS FU D PROJECT THAT AR	AND ANY OTHER AP RNISHED TO THE CO E NOT OTHERWISE D	PLICABLE STA LORADO DEPA EFINED AS "ST	RTMENT OF TR	HAVE BEEN	TON FOR THE PRODUCED I	N THE
UNITED STATES OF AM - Nov. 15, 2021) I further certify that all s						Carlo San	(Public Law 1	117-5
	19 Oct . Ol							

CDOT Form 1600

Example of the CDOT Form 1610 Buy America NON-APPLICABLE Projects: Build America, Buy America (BABA) Construction Materials and Manufactured Products Page 1.

CONTRACT ID	12345	PROJECT NUMBER	NHRP	0241-	XXX	PAGE	1 OF	
PROJECT LOCATION	SH XX and Colorado Blvd.							
CONTRACTOR NAME	Kryptonite Construction DATE February 2023				3			
REFERENCED PROJECT PERMANANTLY INCORPO INVESTMENT JOBS ACT I FURTHER CERTIFY THA	TY OF PERJURY IN THE SECOND IS NOT ELIGIBLE FOR THE REQUIR DRATE THE USE OF CONSTRUCTIC (IUA). (Public Law 117-58 – Nov. 15, IT ALL SUPPORTING DOCUMENTA	REMENTS OF THE INFR ON MATERIALS AS DEFI 2021)	ASTRUCTUI NED BY §70	RE AND I 1912 DEFI	NVESTMENT JOBS AC NITIONS OF THE INFR	ASTRUCTUR	S NOT E AND	
REFERENCED PROJECT PERMANANTLY INCORPO INVESTMENT JOBS ACT I FURTHER CERTIFY THA	IS NOT ELIGIBLE FOR THE REQUIR DRATE THE USE OF CONSTRUCTIO (IIJA). (Public Law 117-58 - Nov. 15,	REMENTS OF THE INFR ON MATERIALS AS DEFI 2021)	ASTRUCTUI NED BY §70	RE AND I 1912 DEFI	NVESTMENT JOBS AC NITIONS OF THE INFR	ASTRUCTUR	S NOT E AND	
REFERENCED PROJECT PERMANANTLY INCORPO INVESTMENT JOBS ACT I FURTHER CERTIFY THA	IS NOT ELIGIBLE FOR THE REQUIR DRATE THE USE OF CONSTRUCTIO (IIJA). (Public Law 117-58 - Nov. 15,	REMENTS OF THE INFR IN MATERIALS AS DEFI 2021) TION IS ON FILE AND V	ASTRUCTUI NED BY §70 WILL BE MAI	RE AND I	NVESTMENT JOBS AC NITIONS OF THE INFR O FOR A PERIOD OF TO RUCTION MATERIALS.	AS DEFINED	S NOT E AND S AFTER BY \$709	
REFERENCED PROJECT PERMANANTLY INCORPORT INVESTMENT JOBS ACT I FURTHER CERTIFY THA PROJECT COMPLETION.	IS NOT ELIGIBLE FOR THE REQUIP DRATE THE USE OF CONSTRUCTIO (II)A), (Public Law 117-58 - Nov. 15, AT ALL SUPPORTING DOCUMENTA THE ABOVE REFERENCED P	REMENTS OF THE INFR 2021) TION IS ON FILE AND V ROJECT DOES NOT CC ASTRUCTURE AND INI	ASTRUCTUI NED BY §70 VILL BE MAI ONTAIN ANY VESTMENT	RE AND I	NVESTMENT JOBS AC NITIONS OF THE INFR O FOR A PERIOD OF TO RUCTION MATERIALS.	AS DEFINED	S NOT E AND S AFTER BY \$709 15, 2021)	12

CDOT Form 1610 05/09/2023

American Glass Bead Inc. Desert Ray, Tx. 76660 Phone: (254)562-2541 Fax: (254)562-2542 www.agbi.com

CERTIFIED TEST REPORT

Colorado Department of Transportation (CDOT) project number: MTCE 03-022 Name of Product: AASHTO M 247 Type 1 Colorado Spec Glass Beads

*Product Code: AGBI- 0123

Product Batch Number: 021805

*Product date of manufacturing: April 25, 2017

*Quantity Shipped: 44000 Pounds

* Date of Shipment: TBA

Laboratory Information:

*AGBI Inc.: HWY 40 & FCR 145

*Testing Date: 2/18/05

* Samples Tested: Samples are from Batch # 021805

AASHTO Designation M 247

*AASHTO M 247 Type 1 Colorado Spec

Test Results: Gradation (ASTM Standard D 1214)

Sieve Designation	Specification for AASHTO M 247 Mass Percent Passing (Type 1)	Test Result
No. 20 (0.850 mm)	100	100
No. 30 (0.600 mm)	75-95	86.9
No. 40 (0.425 mm)		-
No. 50 (0.300 mm)	15-35	24.2
No. 80 (0.180 mm)		-
No. 100 (0.150 mm)	0-5	.7

AASHTO M 247 Type 1: Test Results: Other Properties

Element / Method	Specification for AASHTO M 247 Specification Limit	Test Result
Roundness/ASTM D 1155	70% min	71.4%
Crushing Resistance ASTM D 1213	Retained 0.425-mm (No. 40) sieve 133N (30 lbs.) min.	Passing
Refractive Index (Ref: TTB1325C Section 4.3.3)	1.50 min	1.52
Moisture Resistance	Non-Moisture absorption & Free flowing	Passing
Flotation	90% of all beads shall float in xylene	n/a

Certification of Material: The referenced material meets or complies with the AASHTO M 247 Type 1 Colorado Specification.

Clark Kent Quality Control Manager

I hereby certify under penalty of perjury Represents 10,000 LBs of pay item Glass Beads Item 627	that the material listed in this Certified Test Report _(quantity and units)			
(pay item # and description) that will be installed in conformance with the plans and specifications on Project Number XXX-01234				
Clark Kent Digitally signed by Clark Kent Date: 2022 11.02 11.52.24 0.06'00' Contractor Rep. Signature	11/02/2022 Date			

Glass Beads: Acceptance Method: <u>COC</u> and <u>CTR</u>. The Contractor shall provide the Engineer with one copy of Certificate of Compliance (furnished by supplier and stamped by the Contractor) that verifies the Glass Beads have been manufactured from North American glass waste streams in the United States of America, and <u>Certified Test Reports</u> for Glass Beads (furnished by the supplier) to be filed.



Kryptonite Construction Inc.

13369 W Rocky Road Smallville, Colorado 91130 Phone 999-123-4567

Contractor's COC/CTR Verification

Date: 05/06/2022

CDOT Contract ID: 23506

CDOT Project No.: NHPP 1601-123

CDOT Project Location: US 141 Naturita Overlay

Material Information

Material (One Material per Form): Sign Panel

Quantity Represented by COC/CTR: 511 SF - Total Project

Product/Facility Name: Sign Panel - sold by Roadside Surplus

Manufacturer: Road Side Supplies

Description of Material: Sign Panel CI I and II

Lot, Heat, or Batch number: 01407

I hereby certify under penalty of perjury that the material listed in this Certificate of Compliance/Certified Test Report represents:

Pay Item Number	Pay Item Description	Quantity of Pay Item	Pay Item Unit
614-00011	Sign Panel (Class I)	346	SF
614-00012	Sign Panel (Class II)	165	SF
		C	

That will be installed in conformance with the plans and specifications of the aforementioned project.

Kryptonite Construction Inc. 13369 W. Rocky Rd. Smallville, Colorado 91130 Phone 999-123-4567

Clark Kent Digitally signed by Clark Kent Date: 2002/06.13 16-46-12 -09/00/

North-By Northwest Inc. 9876 S. Eva-Marie Blvd. Grant, South Dakota 54321 Phone 999-123-4567

Certificate of Compliance

Product Name: Universal Bridge Deck Expansion Joint

Model: UBDEJ-101 Lot: 135-02

Description: Pre-formed Silicone gland, that can be bonded directly to an Elastomeric Concrete Joint interface with a single component silicon-locking adhesive.

Material Testing Specifications:

Property	Test Method	Mean Value
Durometer (Shore A)	ASTM D 2240	55
Tensile (psi)	ASTM D 412	650 psi
Elongation (%)	ASTM D 412	382%
Tear (die B ppi)	ASTM D 624	88 ppi
Compression Set	ASTM D 395	30%
At 350°F 22 hrs.	17.7	
Operating Temperature Range	4/1	-60° F to 450° F
Specific Gravity		1.51

State Specification Reference:

CDOT Standard Specifications for Road and Bridge Construction Section 412.13 (c). Project plans as required.

CDOT Project Number NH 0507-123

The above referenced tests were performed within our accredited Laboratory on May 10, 20XX.

All tests passed and the minimum required values were exceeded. Applicable laboratory test reports are available upon CDOT request.

North-by-Northwest Inc. Clark Kent

Manager, Quality Assurance

Copy of Certificate of Compliance electronic COC Stamp instructions are located at the end of this chapter. As per PD 21.1 and PD 508.1

I hereby certify under penalty of perjury that the material listed in this Certificate of Compliance represents 100 Liner Feet (quantity and units) of pay item Ebstomenc Expansion Devices Item \$18 (pay item # and description) that will be installed in conformance with the plans and specifications on Project Number NPH 8765

Clark Kent 04/03/2020

Contractor Rep. Signature Date



Kryptonite Construction Inc.

13369 W Rocky Road Smallville, Colorado 91130 Phone 999-123-4567

Contractor's Approved Products List Verification

 Date:
 04/26/2022

 CDOT Contract ID
 12345

 CDOT Project No.
 NHO-010-1245

 CDOT Project Location
 North I-25

The following material was selected from the CDOT Approved Products List (APL) in accordance with the project plans, the 2021 CDOT Standards and Specifications for Road and Bridge Construction, and the 2023 CDOT Field Materials Manual.

NOTE: Include the CDOT Form 595 along with this letter when selecting from the CDOT Approved Products List. (See example of CDOT Form 595 on next page).

CDOT APL Category	Aspnait	
CDOT APL Sub-Category	Emulsion	
CDOT APL Base Category	CSS-1h	
CDOT APL Reference No.	5352-22	
Product / Facility Name	CSS-1h / Suncor Energy BKEP	
Manufacturer	BlueKnight Energy Partners LP.	
	04/26/2022	

Date of CDOT APL Webpage Review and Selection

Kryptonite Construction Inc.

Clark Kent Digitally signed by Clark Clark Kent Date: 2022.04.25

Clark Kent

Construction Manager

I hereby certify under penalty of perjury that the material listed in this Certificate of Compliance represents 10,000 Tons (quantity and units) of pay item 411 Emulsion CSS-1h (pay item # and description) that will be installed in conformance with the plans and specifications on Project Number 12945

Clark Kent Opposity signalty Clark Next Opposity Signalty Signalty Clark Next Opposity Signalty Signalt

Example of Approved Products
List Certificate of Compliance
electronic COC Stamp
instructions are located at the
end of this chapter. As per PD
21.1 and PD 508.1

EXAMPLE Pre-Approved Product Evaluation CDOT Form 595

PRE-APPROVED PRODUCT EVALUAT	TON REQUEST & SUMMARY 5352-22 JSE ONLY			
Product Evaluation Coordinator Colorado Department of Transportation 4670 North Holly Street, Unit A Denver, Colorado 80216	Material Code 702.03.19.00 CDOT Use Only Material Code description full name Emulsion, CSS-1h CDOT Use Only			
PART 1	30 Record and A			
Product name: CSS-1h (2022)	Product category: Asphalt\ Emulsion\ CSS-1h			
Product Representative (name & address): Attn: Jim Hazell Suncor Energy (USA) Inc. 717 17th Street; Suite 2900 Denver, CO 80202	Manufacturer (name & address): Attn: Phil Lawlor BlueKnight Energy Partners, LP 5022 East 60th Avenue Commerce City, CO 80022			
Phone: (303) 793-8009 E-mail: jhazell@suncor.com	Phone: (303) 227-8205 E-mail: plawlor@bkep.com			
Web-site address: www.suncor.com	Web-site address: www.suncor.com			
Source facility: Manufacturing Terminal BlueKnight Energy Partners LP (BKEP) manufactures and stores products on behalf of Suncor Energy (USA) Inc. Restrictions, (installation and/or use):				
Use of the product, (be specific to CDOT highway activities only): Tack Coat, Fog Seal				
Benefits to CDOT, (how will your product enhance quality, improve s	afety, save money, be a better value then other manufacturer's products):			
Specifications: (listing those applicable is required) ✓ CDOT : CDOT Standard Specifications; Section 702 — ASTM : — AASHTO:	; Table 702-2			
FHWA:				
✓ Certificate of Compliance (COC) provided	tificate of Verification (COV) provided for select categories ONLY			
Product Testing: (National/independent laboratories or universities wit □ NTPEP-AASHTO: □ FHWA : □ other : CDOT Bituminous Laboratory □ other : □ other :	th Report Date.) Certified Test Report (CTR) provided to validate all claims.			
State DOT Approvals, (current documentation required):	Expiration Date < 2 Years / 02-01-2023			
Sample submitted: ☐ yes ☑ no ☐ n/a Safety ☐ Alternate Product Category:	Data Sheets (SDS): ✓ yes □ no □ n/a			
CDOT Product RESTRICTIONS by CDOT Evaluator: May be used on CDOT Projects requiring CSS-1H Emulsion CDOT users	Evaluators Signature:			

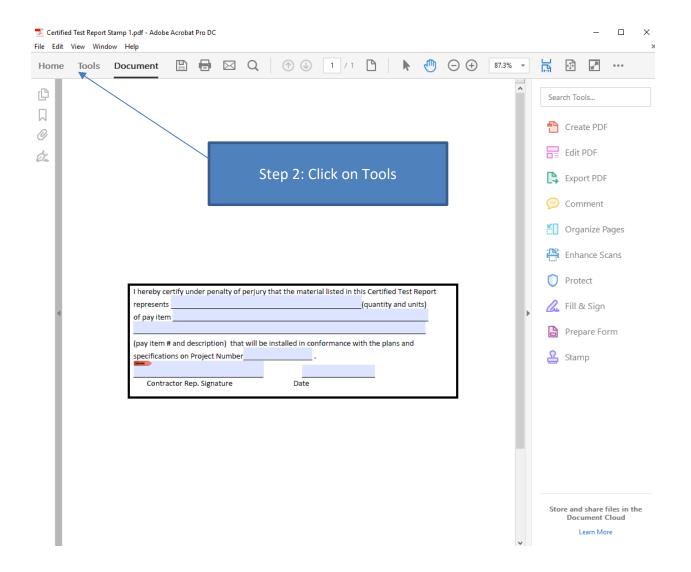
Page 1 of 2 CDOT Form #595 01/2021

Instructions on adding the Electronic Certified Stamps onto your Adobe Pro DC

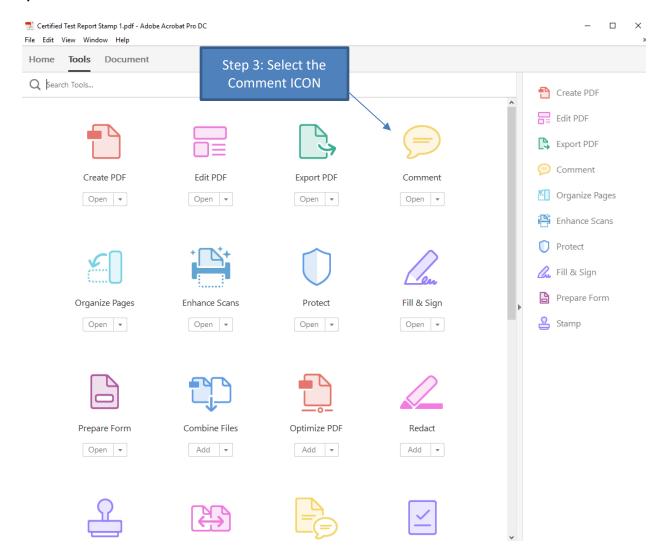
Step 1: Download the following Adobe Stamps onto your computer in a file or desktop using the following link, fill out the stamp with all of your information and electronically sign the stamp, save and continue with the instructions below.

https://www.codot.gov/business/designsupport/materials-and-geotechnical/manuals/2021-fmm

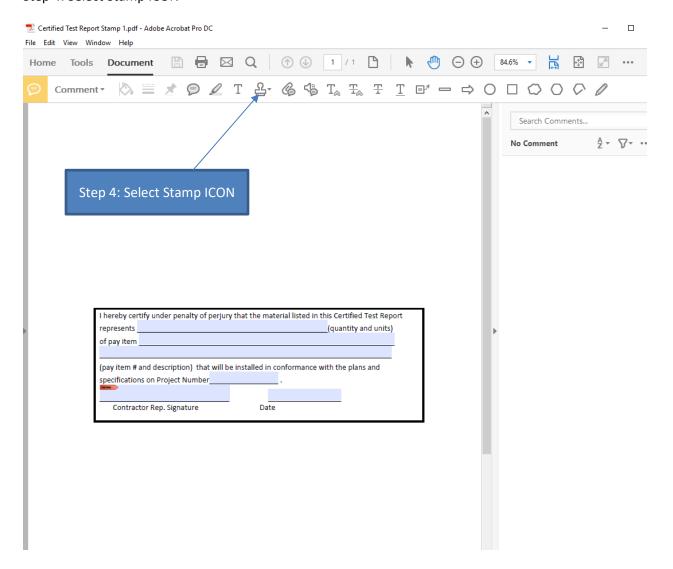
Step 2: Open the file for Certified Stamp using Adobe Pro DC and open "Tools".



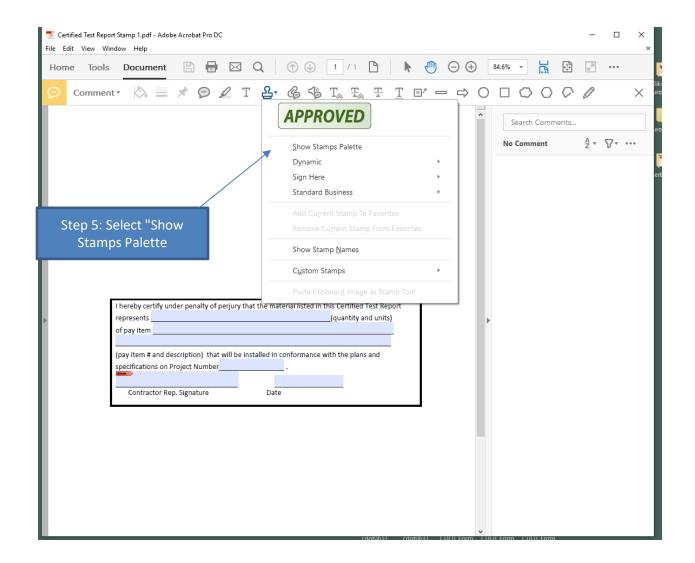
Step 3: Select the "Comment" ICON.



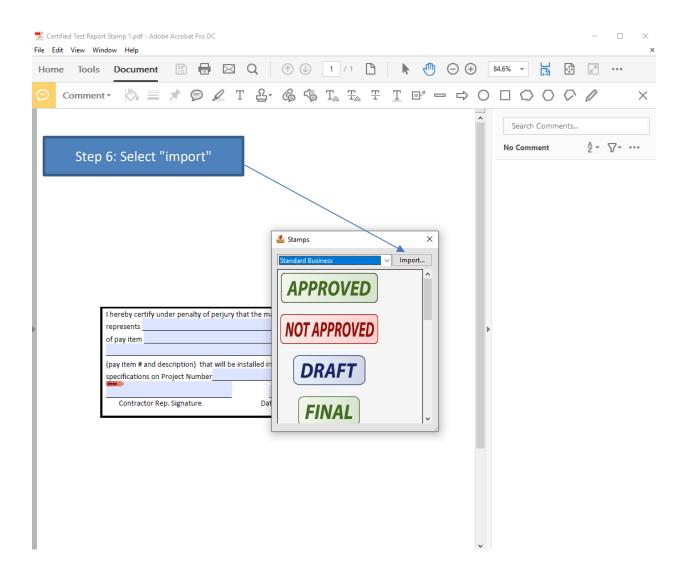
Step 4: Select Stamp ICON



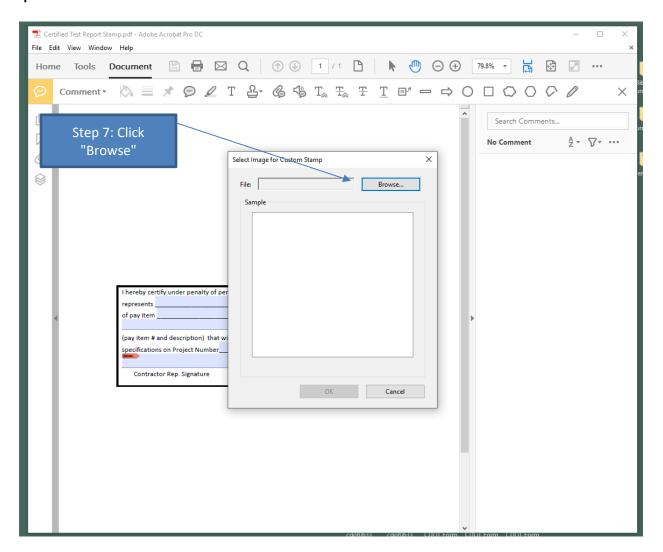
Step 5: Select "Show Stamps Palette"



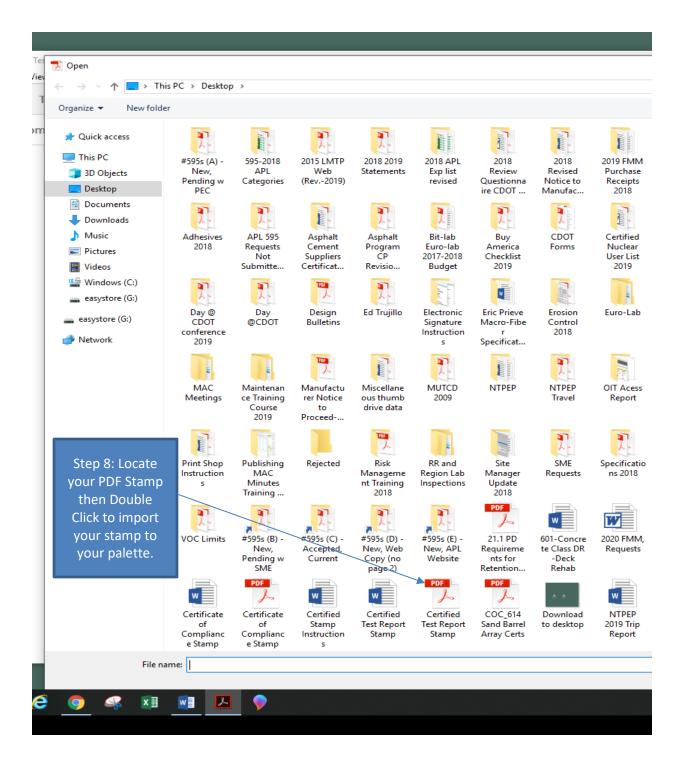
Step 6: Select "Import"



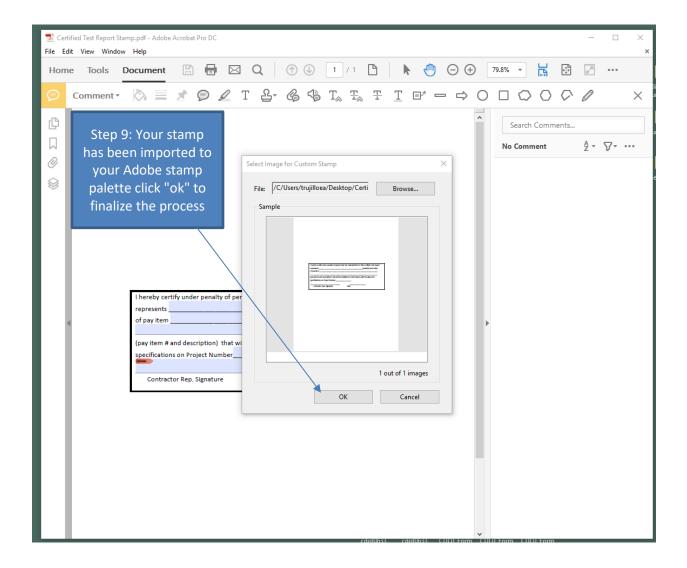
Step 7: Click on "Browse"



Step 8: Locate your Stamp on your computer or desktop.

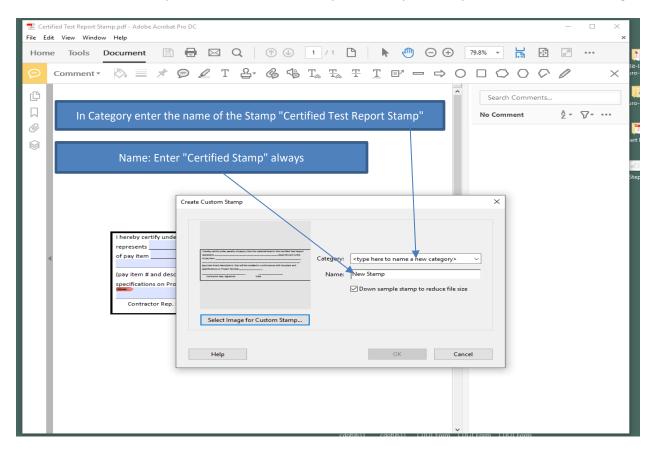


Step 9: Your file "Certified Test Report Stamp" has been imported onto your Electronic Adobe Stamp Palette click "OK" to finalize the process.

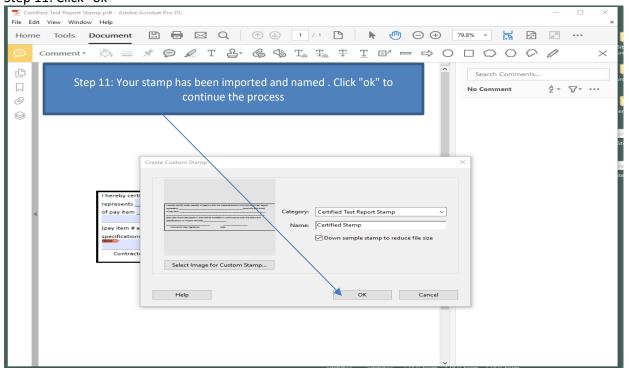


Step 10: You will now name your custom stamp. For "Category" enter the name of the stamp for example "Certified Test Report Stamp".

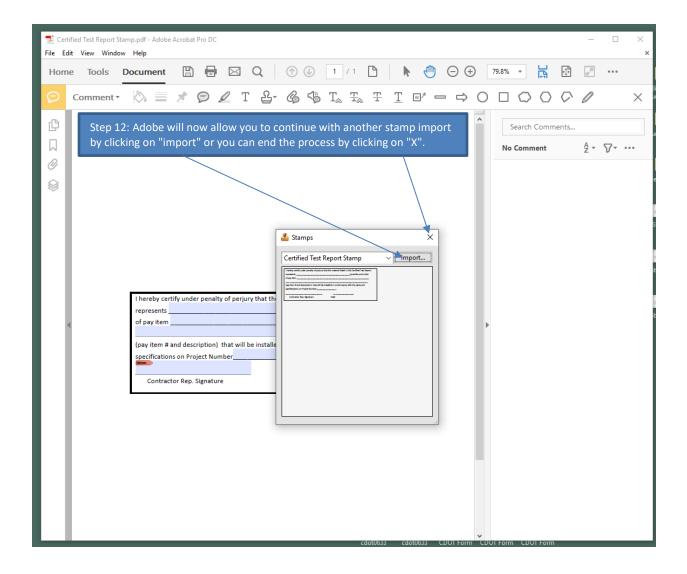
For "Name" enter the required name "Certified Stamp" for all of your stamps, this name will not change.



Step 11: Click "ok"



Step 12: Adobe will now allow you to continue with another stamp import by clicking on "import" or you can end the process by clicking on "X". Repeat the steps to add on more stamps in the future.



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