

Domestic Material Compliance Guidance for NCDOT Construction Projects

Buy America

Build America, Buy America (BABA)



NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

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Foreword

This guidance document was researched, developed, and prepared by the NCDOT Construction Unit. Primary authorship and document coordination were provided by the Central Construction Unit.

The document reflects internal coordination and review by the following NCDOT units:

- Central Construction;
- Contract Standards and Development;
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- Utilities; and
- Communications.

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The Federal Highway Administration (FHWA), North Carolina Division Office, reviewed this guidance during development, and comments were incorporated, as appropriate.

This guidance represents the Department's interpretation of applicable federal and state domestic material requirements as of the date of publication.

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Guidance Status and Disclaimer

This document is provided as guidance to assist NCDOT staff, contractors, consultants, and project partners in understanding and administering domestic material requirements applicable to transportation construction projects.

This guidance does not have the force of law and does not supersede or modify any federal or state statute, regulation, executive action, approved statutory waiver, or NCDOT contract document, including the *NCDOT Standard Specifications for Roads and Structures* and project-specific special provisions.

In the event of a conflict between this guidance and applicable federal or state law, regulation, or contract requirements, the controlling statute, regulation, or contract provision governs.

This guidance reflects the Department's interpretation of domestic material requirements as of the date of publication. Domestic material requirements are subject to change based on statutory amendments, regulatory updates, and federal guidance. Users are responsible for confirming that the requirements applied reflect those in effect at the time of project advertisement, award, and construction.

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Acronyms and Abbreviations

Term	Description
AASHTO	American Association of State Highway Transportation Officials
BAA	Buy American Act
BABA	Build America, Buy America
CCU	Central Construction Unit
CFR	Code of Federal Regulations
CMU	Concrete Masonry Units
CS&D	Contract Standards and Development
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HDPE	Thermoplastic high-density polyethylene
IJA	Infrastructure Investment and Jobs Act
ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent Transportation Systems
LPA	Local Public Agency
M&T	Materials and Tests
MAP-21	Moving Ahead for Progress in the 21st Century Act
MARAD	Maritime Administration
MIAO	Made in America Office
MRR	Material Received Report
NCDOJ	North Carolina Department of Justice
NCDOT	North Carolina Department of Transportation
NCGA	North Carolina General Assembly
NCCS	North Carolina General Statute
NEPA	National Environmental Policy Act
OMB	Office of Management and Budget
PE	Professional Engineer

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Term	Description
PVC	Polyvinyl chloride
RFI	Request for Information
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SDS	Safety Data Sheets
TIP	Transportation Improvement Program
UBO	Utilities-By-Others
USC	United States Code
USDOT	United States Department of Transportation
WBS	Work Breakdown Structure

Definitions

Advertisement: The public advertisement inviting bids for the construction of specific projects.

Applicable Material Cost: Includes on those materials subject to BABA requirements.

Article: A primary numbered subdivision of a section of the Standard Specifications.

Award: The decision of the Department of Transportation to accept the bid of the lowest responsible responsive bidder for work that is subject to the furnishing of payment and performance bonds and such other conditions as may be otherwise provided by law, the proposal and these Standard Specifications.

Chief Engineer: The Chief Engineer, Division of Highways, North Carolina Department of Transportation acting directly or through his duly authorized representatives.

Contract Administrator: The person or entity responsible for administering the construction contract and verifying required domestic material documentation.

Contract Time: The number of calendar days inclusive between the date of availability and the completion date, said dates being established as set forth in the special provisions, including authorized extensions to the completion date.

Contract: The executed agreement between the Department and the successful bidder, covering the performance of and compensation for the work.

Contractor: The successful bidder to whom the contract has been awarded, and who has executed the contract and furnished acceptable contract bonds.

Department or Department of Transportation: A principal department of the Executive Branch that performs the functions of planning, design, construction and maintenance of an integrated statewide transportation system.

DOT-wide: For the context of this guidance, DOT-wide refers to policies, regulations, shared services, or initiatives that apply uniformly across all United States Department of Transportation (USDOT) agencies and modes, rather than being limited to a single specific administration.

Engineer: The Chief Engineer of the North Carolina Department of Transportation, acting directly or through a duly authorized representative, such representative acting within the scope of particular assigned duties or authority.

Equipment: All machinery and equipment, together with the necessary supplies, tools and apparatus for upkeep and maintenance, all of which are necessary for the proper construction and acceptable completion of the work.

Federal Aid: any project or portion of a project receiving federal financial assistance for infrastructure, including but not limited to Title 23 funds and other federal grant or assistance programs.

General/Categorical Waiver: Defines how granted relief is applied across projects or materials.

Highway: A general term denoting a public way for purposes of vehicular travel, including the entire area within the right of way.

Inspector: The authorized representative of the Engineer assigned to make a detailed inspection of any or all portions of the work and materials.

Locally Administered Projects: transportation or infrastructure projects that are limited, managed, and delivered by local public agencies.

Materials: Any substances that may be incorporated into the construction of the project

Pay Item: Synonymous with Contract Item; A specifically described unit of work for which a unit or lump sum price is provided in the contract.

Plans: The approved plans, profiles, typical roadway sections, appropriate standard drawings, supplemental plans and working drawings, or exact reproductions thereof, that show the location, dimensions and details of the work to be done and that are a part of the contract.

Prime Contractor: The primary responsible party for a public construction project.

Project: the broader transportation improvement or undertaking evaluated through planning and National Environmental Policy Act (NEPA) processes and may encompass multiple phases, segments, or construction contracts over time.

Right of Way: The land area shown in the plans as right of way to be furnished by the Department of Transportation within which the project is to be constructed.

Roadway: The portion of a highway within limits of construction.

Special Provisions: Project special provisions and standard special provisions taken together as one body of special provisions.

Specifications: The general term comprising all the directions, provisions and requirements contained or referred to in the Standard Specifications, including the supplemental specifications, together with such additional directions, provisions and requirements that may be added or adopted as special provisions.

Standard Specifications: The general term comprising all the directions, provisions and requirements contained or referred to in this book entitled Standard Specifications for Roads and Structures and in any subsequent revisions or additions to such book that are issued as supplemental specifications.

State: The State of North Carolina.

Statutory Waiver: Establishes the legal authority for granting relief.

Subcontractor: An individual, partnership, firm, joint venture, LLC or corporation to whom the Contractor, with the written consent of the Engineer, sublets any part of the contract.

Work: Furnishing of all labor, materials, equipment and incidentals necessary or convenient to the successful completion of the project, or any part, portion or phase thereof, and the carrying out of all duties and obligations imposed by the contract.

Chapter 1 — Introduction

1.1 Purpose

The purpose of this guidance is to establish a clear and consistent framework for implementing federal and state domestic material requirements on North Carolina Department of Transportation (NCDOT) construction projects. It defines the procedures, documentation standards, and responsibilities necessary to comply with:

- Build America, Buy America Act (BABA);
- 23 CFR 635.410 (FHWA Buy America Regulation);
- 2 CFR Part 184 (Office of Management and Budget (OMB) Implementation Rule); and
- NCGS Section 136-28.7 (North Carolina Domestic Iron and Steel Law).

This document serves as an operational reference for project designers, project owners, manufacturers, suppliers, contractors, subcontractors, Contract Administrators, inspectors, and other NCDOT personnel involved in the design, specification, procurement, verification, or documentation of materials incorporated into NCDOT projects. It describes how domestic material requirements apply to federally funded, state funded, and locally administered projects and explains how material classification, certification, and affirmation processes are to be managed throughout the life of a project.

The intent of this guidance is to support consistent and compliant administration of domestic material requirements, promote the use of domestically produced materials, and provide a unified source of direction for all participants in the construction process. By consolidating federal and state requirements into a single resource, the guidance helps ensure transparency in material procurement, supports eligibility for federal participation, and reflects NCDOT's broader commitment to responsible infrastructure stewardship.

1.2 Scope and Applicability

This guidance applies to all North Carolina Department of Transportation (NCDOT) construction contracts that include domestic material requirements established under state or federal law.

Under NCGS Section 136-28.7, all NCDOT construction and repair contracts, regardless of funding source, must comply with Buy America requirements for iron and steel. This statute establishes a statewide standard requiring that

all iron and steel products permanently incorporated into a project be produced in the United States.

For purposes of this guidance, “federal-aid” includes any project or portion of a project receiving federal financial assistance for infrastructure, including but not limited to Title 23 funds and other federal grant or assistance programs. Federal-aid participation is established at the project level and is informed by planning, programming, and National Environmental Policy Act (NEPA) decisions. When Title 23 federal funds are authorized for work within the scope of a NEPA-approved project, applicable Federal Highway Administration (FHWA) requirements apply prospectively to materials permanently incorporated into the federal-aid project, consistent with FHWA policy.

For purposes of applying domestic material requirements, it is important to distinguish between a “project” and a “contract.” A “project” refers to the broader transportation improvement or undertaking evaluated through planning and NEPA processes and may encompass multiple phases, segments, or construction contracts over time. A “contract” is a specific construction agreement executed to perform a defined portion of work within that project.

Domestic material requirements associated with federal-aid participation apply at the project level and are not limited to individual contracts in isolation. Accordingly, the applicability of federal requirements cannot be determined solely by whether a particular contract includes federal funding but must be evaluated in the context of the overall project and its federal-aid status.

For federal-aid highway projects, domestic material requirements implemented under BABA also apply. These requirements expand the scope of Buy America beyond iron and steel to include construction materials and manufactured products, as defined in 2 CFR Part 184 and implemented for the federal-aid highway program through FHWA’s Buy America authority under 23 USC Section 313 and 23 CFR 635.410. Accordingly, for federal-aid projects, applicable domestic material requirements are determined under the FHWA framework governing those projects, including requirements that apply to covered materials permanently incorporated into the work.

Accordingly, this guidance establishes uniform expectations and procedures for projects administered by NCDOT, including state funded projects that

must comply with North Carolina's iron and steel requirements, federal-aid highway projects that must comply with Buy America as implemented under 23 CFR 635.410 (including BABA-related provisions), and locally administered projects that receive federal funding and are subject to the same federal domestic material standards and documentation requirements.

The procedures described in this guidance apply to all parties involved in the design, specification, procurement, supply, acceptance, or documentation of materials incorporated into NCDOT projects. This document is intended to be used alongside *NCDOT's Standard Specifications for Roads and Structures (Standard Specifications)*, applicable special provisions, and Materials & Tests (M&T) procedures.

1.2.1 Use of the Term Contract Administrator

For purposes of this guidance, 'Contract Administrator' means the person or entity responsible for administering the construction contract and verifying required domestic material documentation. For NCDOT-administered contracts, this role may be performed by a Resident Engineer, District Engineer, Maintenance Engineer, or other authorized Department representative, depending on the contract type and administering unit. For locally administered projects, this role may be performed by the local agency's project manager, consultant, or other authorized representative. This functional term does not modify the definition of 'Engineer' in the Standard Specifications or alter authority established by the contract documents.

1.3 Legal and Regulatory Framework

NCDOT's domestic material compliance requirements are established through a combination of federal statutes and regulations and North Carolina law, which together define the standards governing the use of domestically produced materials in transportation construction.

At the federal level, 23 USC Section 313 (Buy America) provides the statutory basis for requiring that iron, steel, and manufactured products used in federal-aid highway projects be produced in the United States unless an approved waiver applies. Although manufactured products were included in the original statute, FHWA issued a general applicability waiver in 1983, and enforcement for several decades focused primarily on iron and steel. The

implementing regulation, 23 CFR 635.410, sets forth the procedures for demonstrating compliance and the processes for pursuing waivers.

Because the term is often confused with “Buy America,” it is important to note that the Buy American Act (BAA) applies to direct federal procurement and does not govern federal-aid highway projects. FHWA’s Buy America requirements under 23 USC Section 313 are the controlling domestic material standards for NCDOT’s federally funded construction projects.

BABA was enacted as part of the Infrastructure Investment and Jobs Act (IIJA) of 2021 and broadened federal domestic preference policy in two notable ways. It required federal agencies to apply Buy America principles across their infrastructure programs, which led FHWA to terminate the long-standing manufactured products general waiver and restore enforcement of statutory domestic content requirements that had previously been waived. BABA also introduced a separate category of construction materials, extending domestic content requirements beyond iron and steel. The Office of Management and Budget (OMB) codified these standards in 2 CFR Part 184, which provides uniform definitions, classification rules, and documentation requirements. FHWA incorporated these provisions into the federal-aid highway program through its 2025 revision to 23 CFR 635.410.

At the state level, NCGS Section 136-28.7 requires that every NCDOT construction or repair contract includes a clause mandating the use of domestically produced iron and steel. This requirement applies regardless of funding source and aligns state law with the core federal standard for iron and steel production.

Together, these authorities form a unified legal structure for domestic material compliance on NCDOT projects. For federal-aid projects, compliance is determined at the project level and is not avoided by electing not to seek reimbursement for specific materials or pay items. All materials permanently incorporated into a federal-aid project must comply with applicable domestic content requirements unless an authorized waiver applies. Neither NCDOT nor local agencies may waive or exempt materials from those requirements independently. Any potential compliance concern must therefore be identified and addressed during project development and before contract execution.

1.4 Goals of the Program

The purpose of NCDOT's Domestic Material Compliance Program is to ensure that all materials permanently incorporated into transportation projects are procured, documented, and verified in accordance with applicable federal and state domestic preference requirements. The program provides a unified framework for administering domestic material requirements, including Buy America requirements as expanded and clarified under BABA, across all NCDOT-administered and locally administered projects.

The program is structured around three overarching goals. The first is maintaining full compliance with federal and state domestic material laws and regulations. Consistent adherence to these requirements protects NCDOT's eligibility for federal participation and ensures that each contract satisfies the intent of the governing statutes. The second goal is establishing transparent and accountable documentation practices. Clear certification and reporting procedures create traceable records of domestic sourcing and support effective oversight throughout construction and during state or federal audits. The third goal reflects the broader national policy objective of supporting U.S. manufacturing. By requiring domestically produced materials, the program contributes to strengthened domestic supply chains and aligns NCDOT's construction program with the economic and policy objectives of Buy America and BABA.

Together, these goals ensure that all participants, including designers, contractors, subcontractors, suppliers, contract administrators, inspectors, and NCDOT support units, understand their roles in maintaining the integrity of domestic material compliance from project development through project closeout.

The following chapter provides background on the legislative and regulatory developments that shaped current domestic material requirements. This context helps explain how the program evolved and supports correct application of the requirements in current contracts.

Chapter 2 — Domestic Material Timeline

2.1 Overview of Key Federal and State Milestones

The development of domestic material requirements in transportation construction spans more than four decades and reflects a gradual evolution from early statutory mandates to the unified national framework in place today. The federal program began with the Surface Transportation Assistance Act of 1978, which first required the use of domestically produced materials on federal-aid highway projects. These requirements were significantly strengthened in the Surface Transportation Assistance Act of 1982, which extended the domestic preference to iron, steel, and manufactured products, and established the statutory foundation for the Federal Highway Administration's (FHWA) Buy America authority now codified at 23 USC Section 313.

FHWA issued its implementing regulation in 1983 at 23 CFR 635.410. While the statute included manufactured products, FHWA simultaneously issued a general applicability waiver for manufactured products, resulting in enforcement for several decades that focused primarily on iron and steel. The regulation was refined in subsequent years, including the exclusion of cement from coverage in 1984 and clarification of iron and steel manufacturing requirements in 1993.

North Carolina established its own domestic material requirement in 1989 through NCGS Section 136-44.8, which was later recodified in 2002 as NCGS Section 136-28.7. This statute requires the use of domestically produced iron and steel on all NCDOT construction and repair contracts, creating a statewide standard consistent with core federal Buy America requirements regardless of funding source.

Federal Buy America requirements were permanently recodified within Title 23 under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in 2005 (23 USC Section 313), reaffirming Congress' intent that domestic preference requirements apply to federal-aid highway projects.

In 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) further clarified the scope of these requirements by providing that Buy America applies on a project-wide basis to all eligible contracts carried out within the scope of the applicable National Environmental Policy Act (NEPA) decision when any contract on the project is funded with Title 23 funds, regardless of the funding source of individual contracts.

Between 2009 and 2020, various project-specific and program-specific waivers were issued across federal infrastructure programs, contributing to inconsistent application of domestic content requirements nationwide.

A shift toward uniformity began in 2021 with Executive Order 14005 and enactment of the Build America, Buy America Act (BABA) as part of the Infrastructure Investment and Jobs Act (IIJA). BABA directed federal agencies to apply Buy America principles consistently across infrastructure programs, ending the long-standing manufactured-products waiver and restoring previously waived statutory domestic content requirements. BABA also introduced a distinct category of construction materials, expanding domestic preference requirements beyond iron and steel.

The Office of Management and Budget implemented these requirements through memoranda M-22-11 (2022) and M-24-02 (2023) and codified the Final Rule at 2 CFR Part 184 in 2023. FHWA completed implementation for the federal-aid highway program through its 2025 final rule revising 23 CFR 635.410, incorporating BABA's construction-material and manufactured-product requirements into the existing Buy America regulation, rather than establishing a separate regulatory framework.

The phased compliance dates of October 1, 2025, for domestic final assembly of manufactured products and October 1, 2026, for the 55-percent domestic component cost requirement mark the full implementation of the modern FHWA Buy America program as expanded under BABA.

Appendix A (Historical Timeline of Federal and North Carolina Domestic Material Requirements) and Appendix H (Governing Authorities and Source Documents) are available for further reference.

Chapter 3 — Material Categories, Classification, and Workflow

3.1 Domestic Material Categories

Federal domestic preference requirements divide construction materials into three principal categories:

- Iron and steel products;
- Construction materials; and
- Manufactured products.

These categories, established in the Build America, Buy America Act (BABA), 2 CFR Part 184, and implemented for the federal-aid highway program by FHWA through the 2025 amendments to 23 CFR 635.410, form the basis for determining how domestic content requirements apply to materials incorporated into NCDOT projects. Under the Single Classification Rule (2 CFR 184.4(e)(2)), each material must be assigned to one, and only one, category based on its composition and form as delivered to the project.

3.1.1 Iron and Steel Products

Products in which iron or steel is the predominant material, such as reinforcing bars, structural shapes, girders, plates, couplers, or castings, are classified as iron and steel products and are subject to the most stringent domestic content requirements. For these products, all manufacturing processes, including melting, casting, rolling, forming, shaping, forging, fabrication, coating, and finishing, must occur in the United States.

Under federal regulations, a product is considered an iron or steel product when iron or steel constitutes more than 50 percent of the total cost of its components. The application of this cost-based determination, including the evaluation of component costs, is addressed through the material classification workflow and supporting appendices.

When a product is classified as an iron or steel product, Buy America requirements apply to the iron or steel components of the product, and domestic content requirements applicable to manufactured products or construction materials do not apply.

Iron and steel domestic content requirements apply to all NCDOT construction contracts, regardless of funding source, under NCGS Section 136-28.7.

3.1.2 Construction Materials

Construction materials are single, homogeneous items that are neither predominantly iron or steel nor composed of multiple assembled components. Typical examples include non-ferrous metals (such as aluminum, copper, and zinc), plastics and polymer-based products (including polyvinyl chloride and composite polymers), glass (including optical glass), optical fiber and fiber optic cable, lumber and engineered wood products, and drywall.

For construction materials, all manufacturing processes, from the initial formation or extrusion of the raw material through final shaping and finishing, must occur in the United States. These requirements apply to federal-aid projects in accordance with 2 CFR 184.6(a) and 23 CFR 635.410(c)(2).

3.1.3 Manufactured Products

Manufactured products are items created through the combination or assembly of multiple components, at least one of which has undergone substantial transformation. Compliance requires domestic final assembly and, beginning October 1, 2026, greater than 55 percent of component cost must be sourced in the United States. This category includes electrical cabinets, Intelligent Transportation Systems (ITS) devices, lighting fixtures, preassembled vaults, sign structures, and similar items. Domestic content requirements for manufactured products are established in 2 CFR 184.5 and implemented for FHWA projects in 23 CFR 635.410(c).

The evaluation of component costs for manufactured products is addressed in the material classification workflow and supporting appendices.

3.1.4 Statutorily Excluded Materials (IIJA Section 70917(c))

Certain materials, including cement, cementitious materials, aggregates such as stone, sand, or gravel, and aggregate binding agents or additives, are expressly excluded from the definition of construction materials under Section 70917(c) of the Infrastructure Investment and Jobs Act (IIJA). These materials are not subject to BABA domestic content requirements when delivered for use in their excluded form and not incorporated into a finished manufactured product. When excluded materials are incorporated as components of a manufactured product, the manufactured product must comply with applicable domestic content standards.

3.1.5 Mixtures of Excluded Materials Delivered Without Final Form

Certain mixtures of excluded materials, such as cement, aggregates, and binding agents, may be delivered to a project site without final form for incorporation into the work. When such mixtures are delivered in an unset, unhardened, or otherwise incomplete condition that requires on-site placement to achieve their finished form, such as ready-mixed concrete or hot-mix asphalt, they are not classified as manufactured products and are not subject to domestic content requirements.

This treatment applies only when the mixture is delivered without final form and requires on-site placement to achieve its finished condition. The classification of materials delivered in a finished or prefabricated form is addressed below.

3.1.6 Finished Products and Mixed-Composition Items

When excluded materials are combined with other materials (including other excluded materials) and processed into a finished product before delivery to the project site, the resulting item must be classified based on its composition, configuration, and function as delivered, in accordance with the Single Classification Rule. The exclusion status of individual components does not control the classification of the finished product.

Some finished products incorporate both excluded materials and covered materials, such as concrete elements containing reinforcing or prestressing steel. In these cases, the product must be assigned to a single domestic-material category. Certain manufactured products that contain iron or steel components may also be subject to additional iron and steel requirements under FHWA regulations. These requirements are addressed in *Section 3.3.3 (FHWA-Specified Iron and Steel Requirements Within Certain Manufactured Products)*.

3.1.7 Materials Not Subject to Domestic Content Requirements

Certain materials permanently incorporated into a project may nevertheless fall outside the domestic material categories established under 2 CFR Part 184 and 23 CFR 635.410. Examples include biological or agricultural materials such as seed, straw, sod, fertilizer, or live plants. These materials are not classified as iron and steel products, construction materials, or manufactured products and are not subject to domestic content requirements unless they are incorporated into a covered product or assembly.

3.1.8 Reference Chart

Table C-1: Permanent Material Classification Reference Chart (Appendix C) summarizes typical classifications of commonly used transportation materials. This chart offers illustrative guidance on likely classifications and expected documentation requirements, but it is not exhaustive. Because classifications may vary based on a material's composition, configuration, or intended use, the appendix should be treated as a resource rather than a definitive listing. NCDOT will update the appendix as federal guidance evolves.

3.2 Temporary Materials

Federal domestic preference requirements apply only to materials that are permanently incorporated into the completed facility. Under 23 USC Section 313, 23 CFR 635.410, and 2 CFR Part 184, a material is subject to domestic material requirements only if it remains in place and performs a continuing role after construction, not based on how or when the material is used during construction.

For purposes of this guidance, temporary materials are materials used solely to facilitate construction activities or installation operations that do not perform a continuing structural, operational, or functional role after construction is complete. Permanently incorporated materials are those that remain in place as part of the finished facility and continue to serve a structural, operational, or long-term functional purpose in the completed asset.

Some materials may be permanently incorporated into the completed project yet still fall outside the domestic material categories established under 2 CFR Part 184 and 23 CFR 635.410. These materials are addressed separately in *Section 3.1.7 (Materials Not Subject to Domestic Content Requirements)* and are not considered temporary merely because they are biological, agricultural, biodegradable, or naturally occurring.

Materials that are temporary in purpose or function, incidental to construction means and methods, or sacrificial to installation activities are not considered permanently incorporated, even if they are present on the project site during construction.

This interpretation is consistent with FHWA practice. In determining whether a material is permanently incorporated, FHWA evaluates whether the

material performs a continuing role in the completed facility, rather than relying on visibility, biodegradability, recoverability, or method of payment. Materials that are removed before completion, that lose functional integrity once construction objectives are achieved, or that are incidental to construction activities may be treated as temporary, provided they are not relied upon in the completed design.

In limited circumstances, materials that remain in place after construction may still be treated as temporary if they are not intended or relied upon by the design to serve a continuing structural, operational, or functional role in the completed facility and their continued presence is merely incidental to construction activities. Such materials are considered sacrificial or installation-facilitating elements rather than components of the finished asset.

Any determination to treat an in-place material as temporary must be supported by documentation demonstrating that the material is not credited in design assumptions, not maintained as an asset, and not relied upon for long-term performance. Materials that remain connected to active systems, appear on record drawings as functional infrastructure, or could reasonably be reactivated or reused, must not be treated as temporary.

When there is uncertainty as to whether a material is temporary or permanently incorporated, the Contractor must notify the Engineer. The Engineer will coordinate, as appropriate, with the Materials & Tests Unit to determine the proper treatment.

3.3 Single Classification Rule

Federal domestic preference requirements apply based on how a material is classified, and under 2 CFR 184.4(e)(2), each material incorporated into a project must be assigned to one (and only one) domestic material category: iron and steel, construction material, or manufactured product.

This Single Classification Rule ensures that every item is evaluated under a single, consistent standard and that no material is subjected to overlapping or conflicting requirements. Once a material is classified, only the requirements for that category apply.

Materials that are statutorily excluded from domestic content requirements under Section 70917(c) of the IJA are not subject to classification under this

rule unless and until they are incorporated into a product that itself is subject to classification.

3.3.1 Classification Based on the Delivered Form

A material must be classified in the condition in which it is delivered to the project for incorporation. FHWA guidance reinforces that embedded, attached, or preassembled components are not classified separately once integrated into a finished product. Likewise, items supplied as single-material components, such as Polyvinyl chloride (PVC) pipe, a polymer sheet, or a pane of glass, are classified based on that form alone, regardless of how they may be used or assembled later.

Certain products may be procured as kits, consisting of multiple components supplied by a single manufacturer or supplier with the intent that the components be assembled or installed together to perform a single, unified function once incorporated into the project.

When a kit is delivered for permanent incorporation and functions as a single item in the completed facility, it is classified as a single manufactured product under the Single Classification Rule, even if its individual components are delivered separately or assembled on site. In such cases, the components of the kit are not classified or evaluated individually, and domestic content compliance is determined based on the manufacturing activities performed by the kit manufacturer, rather than on the contractor's on-site assembly activities.

This approach maintains consistency, avoids reclassification based on hypothetical procurement pathways, and aligns NCDOT practice with the intent of 2 CFR 184.4(e).

3.3.2 How the Rule is Applied

The classification process is based on the composition and function of the material as delivered and follows the step-by-step workflow provided in *Appendix B (NCDOT Domestic Material Classification Workflow)*.

1. Determine the Predominant Material

- If the product is predominantly iron or steel by cost or function, it is classified as an iron and steel product.
- If the product consists of a single homogeneous material, whether non-ferrous metals (such as aluminum, copper, brass, or zinc) or non-metallic (such as glass (including optical glass), plastic and

polymer-based products (including PVC, composite building materials, and polymers used in fiber optic cables), engineered wood, lumber, drywall, optical fiber, or fiber optic cable (including drop cable), it is classified as a construction material unless it qualifies as iron or steel. Minor additions such as binding agents, dyes, or adhesives that do not materially alter the item's properties do not affect classification.

- If the product is composed of multiple components or assembled elements, it is classified as a manufactured product.

2. Avoid Double Classification

- A product may be placed in only one category under this rule.
- Assemblies remain manufactured products even if their components, when purchased separately, would fall within another category.
- Items that are predominantly iron or steel (such as reinforcing cages, prestressing strand, or structural steel) remain iron and steel products even when delivered in assembled form.

These general principles should be applied together with the detailed decision steps in *Appendix B (NCDOT Domestic Material Classification Workflow)*, which provides a structured method for evaluating ambiguous or borderline products and identifying when the classification must be elevated to NCDOT for review.

3.3.3 FHWA-Specified Iron and Steel Requirements Within Certain Manufactured Products

Although the Single Classification Rule assigns each item to a single domestic material category, FHWA requires that certain iron and steel components embedded within manufactured products independently comply with iron and steel domestic content requirements. These provisions do not alter the classification of the overall product but impose additional compliance obligations for specified components.

FHWA has identified common applications where this requirement applies:

1. Precast Concrete Products

- For precast beams, panels, barriers, and similar products, reinforcing steel, prestressing strands, anchor plates, lifting devices, and other iron and steel components must individually satisfy all applicable iron and steel requirements. The precast item as a whole remains classified as a

manufactured product, but the embedded steel elements are subject to independent compliance.

2. Electrical and ITS Equipment with Embedded Steel Components

- For manufactured electrical or ITS systems (e.g., traffic signal cabinets or control assemblies), iron and steel components such as enclosures or housings must meet applicable iron and steel requirements when incorporated into the system. The overall system remains classified as a manufactured product, but the steel components are subject to independent compliance.

In all cases, classification is based on the product as delivered. Embedded iron and steel components subject to these requirements must meet applicable domestic manufacturing standards and are also included in the total component cost used to evaluate the greater than 55 percent domestic content requirement for manufactured products, where applicable.

3.3.4 Documenting the Classification

The assigned classification should be recorded on the Domestic Material Self-Certification Form and verified by the Contractor before incorporation. When classification is uncertain, the Contractor shall submit the item to the Engineer for review. The Engineer may coordinate with the NCDOT Central Construction Unit or the Materials & Tests Unit to determine the appropriate classification.

Examples include:

- **Precast/prestressed beams:** Classified as manufactured products, but reinforcing and prestressing components must meet iron and steel requirements.
- **Aluminum light poles with base plates:** Classified as manufactured products because they consist of multiple assembled components.
- **PVC conduit:** Classified as a construction material when composed of a single polymeric material.

By applying the Single Classification Rule consistently, NCDOT ensures uniform treatment of materials across all projects and maintains alignment with federal domestic preference requirements.

3.4 NCDOT Material Certification Workflow

Accurate classification and documentation of materials are essential to ensuring compliance with federal and state domestic material requirements. The process used on all NCDOT projects follows a standard workflow that identifies the material, verifies domestic content compliance, and ensures proper certification and review before incorporation into the work.

3.4.1 Identification and Classification

Before procurement or fabrication, the manufacturer, supplier, or contractor evaluates the material to determine its composition, primary function, and intended use. Using the definitions in *Section 3.1 (Domestic Material Categories)*, *Section 3.3 (Single Classification Rule)*, and the examples in *Table C-1: Permanent Material Classification Reference Chart (Appendix C)*, the material is assigned to one domestic material category: iron and steel, construction material, or manufactured product.

If the classification is unclear or does not readily align with one category, the Contractor shall submit the item to the Engineer for review under Subarticle 106-1(D) of the *Standard Specifications*. The Engineer may consult the Central Construction Unit or the Materials & Tests Unit before issuing a determination. The assigned category governs all subsequent documentation and verification requirements.

3.4.2 Verification of Domestic Manufacturing and Content

Each category carries distinct compliance expectations.

Iron and steel products must have all manufacturing processes, from melting through coating, performed in the United States.

Construction materials must have all manufacturing processes for the single covered material type performed in the United States.

Manufactured products must have final assembly in the United States, and beginning October 1, 2026, greater than 55 percent of total component cost must be sourced in the U.S.

Manufacturers and suppliers retain supporting documentation such as mill certifications, certificates of origin, or component-cost records to substantiate these determinations.

3.4.3 Completion of the Self-Certification

The manufacturer or supplier completes the NCDOT Domestic Material Self-Certification Form. The form captures the material description, assigned category, project identification, and the certifications required to demonstrate compliance with applicable domestic content requirements.

3.4.4 Contractor Review

Before incorporation or payment, the Contractor reviews each certification to confirm that it corresponds to the materials delivered, is complete, and contains all required signatures and supporting documentation. Any deficiencies must be resolved before the material is installed or included in a pay request. The Contractor remains responsible for the accuracy of all certifications, including those submitted through subcontractors or secondary suppliers.

3.4.5 Contract Administrator Verification

The Contract Administrator confirms that the material classification is consistent with *Section 3.1 (Domestic Material Categories)*, *Section 3.3 (Single Classification Rule)*, and *Appendix C (Permanent Material Classification Reference Chart)*. This includes ensuring that required documentation is complete and traceable to the delivered material. The Contract Administrator or designee also confirms that payment is made only after compliance has been verified. The Contract Administrator also confirms that quantities are accurately documented in the Materials Received Report.

3.4.6 Summary

This workflow establishes a consistent approach for identifying, certifying, and verifying materials subject to applicable federal and state domestic material requirements. Following these procedures supports compliance, maintains eligibility for federal participation, and ensures transparency in material sourcing across all NCDOT projects.

Chapter 4 — Project Development, Design, and Owner Responsibilities

4.1 Project Planning, Programming, and Federal-Aid Applicability

Federal domestic material requirements apply at the project level for federal-aid highway projects. For purposes of Buy America and Build America, Buy America (BABA) compliance, a “project” is defined by the scope of the approved National Environmental Policy Act (NEPA) decision, rather than by individual construction contracts.

Under the Moving Ahead for Progress in the 21st Century Act (MAP-21) and subsequent FHWA guidance, once federal-aid participation is planned for or introduced into any contract or work activity within the scope of a NEPA decision, Buy America requirements apply prospectively to all eligible contracts and agreements developed under that decision. The applicability of Buy America is not limited to the specific contract that directly receives federal funds.

Accordingly, programming and project development decisions play a critical role in determining domestic material compliance obligations. During planning and programming, NCDOT evaluates whether federal-aid funding is reasonably anticipated for any portion of a NEPA-approved project and considers the implications of that determination when advancing design, utility coordination, and contract packaging.

Contracts executed prior to the authorization of federal-aid funds are not retroactively subject to Buy America requirements; however, once federal-aid participation is established for a project, subsequent contracts within the NEPA scope must comply with applicable domestic material requirements, regardless of the individual funding source used for each contract.

Federal participation during earlier phases of project development, such as planning, environmental review, preliminary engineering, design, right of way, or utility coordination, may be relevant in determining whether domestic material requirements apply to later contracts within the scope of the approved NEPA decision. When federal-aid participation has been used to advance a NEPA-approved project, project teams should evaluate whether applicable domestic material requirements apply prospectively to subsequent contracts developed under that decision.

Early identification and documentation of federal participation, funding assumptions, and programming decisions during project development

supports consistent application of Buy America and BABA requirements and reduces risk during FHWA review or audit.

4.2 Design and Specification Responsibilities

Designers and project owners play a central role in ensuring that domestic material requirements can be met once a project moves into construction. Because compliance ultimately depends on the materials incorporated into the work, considerations related to domestic sourcing must be addressed during project development rather than after advertisement or award.

Designers and owners are responsible for confirming that materials identified in plans, technical specifications, special provisions, owner-furnished material lists, and utility-relocation designs can be procured from domestic sources consistent with 23 USC Section 313, 23 CFR 635.410, 2 CFR Part 184, and NCGS Section 136-28.7. This includes verifying that materials required under agency standards or utility owner standards have viable domestic-compliant options within current industry supply.

To support successful procurement during construction, project development typically considers whether specified materials have known domestic compliant suppliers, whether extended domestic manufacturing lead times may affect project phasing or contract time, whether alternative materials or revised design details could reduce reliance on materials with limited domestic availability, and whether early coordination with NCDOT units or utility partners is warranted due to sourcing constraints.

For materials with extended domestic lead times, designers may document schedule adjustments or, where appropriate, determine whether owner-furnished procurement is feasible. When a material appears unlikely to be available in a compliant domestic form, project development should address before advertising whether an acceptable compliant alternative exists, whether a design modification is appropriate, or whether a statutory waiver should be considered. Waiver requests must begin early in project development; FHWA does not consider waivers for materials already procured or installed, and approval cannot be assumed after advertisement.

Designers and project owners should coordinate, as appropriate, with the NCDOT Central Construction Unit (CCU), Materials & Tests (M&T) Unit, Contract Standards and Development (CS&D) Unit, Utilities Unit, and the FHWA Division Office to confirm availability and ensure that plans and specifications reflect current requirements. Documentation developed

during design to support material selection should be retained, including availability assessments, communication with suppliers, and analyses of potential domestic sourcing limitations.

By addressing domestic material considerations during design, NCDOT helps ensure that contract documents are achievable, reduces the risk of construction-phase delays related to sourcing, and supports continued compliance with state and federal domestic preference requirements.

4.3 Utility Coordination, Utility Design, and Utility Owner Responsibilities

Many NCDOT projects require utility relocations to be completed before highway construction activities can begin. These relocations may be performed by municipalities, private utility owners, or the construction contractor, depending on facility ownership and cost-responsibility arrangements. Because utility work directly affects constructability, project sequencing, and eligibility for federal participation, domestic material considerations must be addressed early during utility coordination and utility design.

The applicability of domestic material requirements to utility relocations depends on several interrelated factors, including who performs the work, who bears the cost responsibility, and whether the relocation is part of a federal-aid undertaking following the approved NEPA decision. Early coordination during project development helps ensure that materials incorporated into utility facilities comply with applicable requirements and can be procured without introducing avoidable delays to the construction schedule.

4.3.1 Utility Work Included in the Construction Contract (Utility Construction Plans)

Some utility relocations are incorporated directly into the NCDOT construction contract and shown as Utility Plans within the roadway plans. In these cases, the work is performed by the Contractor under contract line items and is typically funded by NCDOT, often through municipal agreements or a statutory authority such as NCGS Section 136-27.1. When utility work is included in the construction contract, it is treated in the same manner as other contract work for purposes of domestic material compliance.

Utility facilities designed and constructed under the contract must comply with the *Utilities Accommodation Manual*. All materials furnished and installed by the Contractor are subject to applicable federal and state domestic material requirements, including those established under 23 USC Section 313, 23 CFR 635.410, 2 CFR Part 184, and NCGS Section 136-28.7. During design, specified utility materials, such as pipe, valves, fittings, hydrants, casings, appurtenances, electrical cabinets, and control systems shall be reviewed to confirm that domestically compliant options are available prior to advertisement. Where domestic manufacturing lead times or sourcing constraints are known, these considerations should be reflected in contract time or construction phasing.

Municipal water and sewer installations commonly fall within this category of utility work included in the construction contract. When municipal facilities are constructed by the Contractor under municipal agreements, they are subject to the same domestic material requirements as other contract work. Municipal standard details, products, and components proposed for inclusion in the contract should, therefore, be reviewed during design to confirm that domestically compliant options are available. Materials that do not meet applicable domestic content requirements should not be specified, unless a waiver is being pursued and approved prior to advertisement. Early coordination during design helps ensure that municipal requirements are aligned with contract obligations and remain achievable after award.

4.3.2 Utilities-By-Others (UBO) Relocations

Utilities-By-Others (UBO) relocations are performed by the utility owner or its contractor and are shown on UBO sheets within the roadway plans. These relocations are governed by utility agreements and the *NCDOT Utilities Accommodation Manual* and are performed independently of the NCDOT construction contract. Domestic material requirements apply to UBO relocations only under specific circumstances.

In general, domestic material requirements may apply when the relocation is part of a federal-aid project and occurs after the NEPA decision, particularly when the relocation is reimbursable by NCDOT or otherwise involves federal participation. Conversely, domestic material requirements may not apply when the relocation is owner-paid, non-reimbursable under North Carolina General Statutes and the *Utilities Accommodation Manual*, and does not involve federal funds, directly or indirectly, subject to project-specific evaluation. If a utility adjustment is eligible for federal reimbursement,

domestic material requirements apply regardless of whether reimbursement is ultimately requested.

Because indirect federal participation, such as providing excavation, backfill, conduit, or design assistance, may establish a federal interest, each UBO relocation must be evaluated based on its specific facts and funding arrangements. During project development, designers and utility coordinators should confirm whether each UBO relocation is reimbursable or owner-paid and assess the corresponding implications for domestic material compliance. When applicability is uncertain, coordination with the NCDOT Utilities Unit is appropriate to ensure consistent interpretation.

4.3.3 Coordination and Documentation

Effective utility coordination during project development may involve consultation with the NCDOT Utilities Unit, Central Construction Unit, Materials & Tests Unit, Contract Standards and Development Unit, and the FHWA Division Office as appropriate for federal-aid participation. Project files should retain documentation supporting utility-related material decisions, including confirmation of domestically compliant options, identification of long-lead domestic materials, utility-owner acceptance of compliant alternatives, relevant correspondence with manufacturers or suppliers, and any early discussions regarding potential waiver considerations.

4.3.4 Summary

Incorporating domestic material considerations into utility coordination and utility design activities supports continued eligibility for federal participation, helps ensure that materials specified during design can be procured domestically, clarifies compliance expectations for utility owners before construction begins, and reduces the risk of avoidable delays related to material sourcing. This integrated approach supports effective project delivery while maintaining NCDOT's compliance with applicable state and federal domestic material requirements.

Chapter 5 — Manufacturer and Supplier Requirements

5.1 Manufacturer/Supplier Self-Certification

Manufacturers and suppliers are responsible for providing shipment-specific certifications verifying that materials comply with applicable federal and state domestic material requirements. A completed Domestic Material Self-Certification, as shown in *Appendix F (NCDOT Manufacturer and Supplier Domestic Material Self-Certification)*, is required for each shipment delivered to the project site and must be provided before any portion of the material is incorporated into the work or included in a request for payment, whichever occurs first.

Each certification must clearly identify the material, the shipment it represents, the applicable domestic material category, and the NCDOT project for which it is supplied. Generic certifications, annual certifications, blanket statements of compliance, or certifications not tied to a specific shipment are not acceptable.

The certification must be completed by an individual with sufficient knowledge of the material's manufacturing processes, the domestic origin of the covered components, and the supporting documentation. The certifying individual must attest that the information provided is accurate and that the material satisfies the requirements of 23 USC Section 313, 23 CFR 635.410, 2 CFR Part 184, and NCGS 136-28.7, as applicable to its classification.

Manufacturers and suppliers may use the self-certification form (see *Appendix F*) or an equivalent form of their own design, including the American Association of State Highway and Transportation Officials (AASHTO) Domestic Material Self-Certification Form, provided the submission contains sufficient information for the Contractor and Contract Administrator to verify compliance. At a minimum, each certification must include the following:

1. Project Identification

- Project number, contract number (if applicable), county, and a clear description of the associated pay item or specification reference.

2. Material Classification

- Identification of the appropriate domestic material category: iron and steel, construction material, or manufactured product, in accordance with *Section 3.1 (Domestic Material Categories)* and *Section 3.3 (Single Classification Rule)*.

3. Material Description and Shipment Traceability

- A precise description of the material being supplied, including size, type, model, grade, or other distinguishing characteristics, together with shipment-specific identifying information such as an invoice number, bill of lading, lot number, heat number, batch number, or other traceable identifier.

4. Domestic Compliance Statement

- A statement confirming that the material meets the domestic content requirements applicable to its assigned category, including:
 - Completion of all manufacturing processes in the United States for iron and steel products;
 - Completion of all manufacturing processes in the United States for the single covered material type for construction materials; or
 - Final assembly in the United States and compliance with applicable domestic component cost requirements for manufactured products.

5. Supporting Documentation Statement

- Confirmation that the manufacturer or supplier maintains supporting documentation, such as mill test reports, certificates of origin, or component cost information, and will provide such documentation upon request by the Contractor or Contract Administrator.

6. Certifying Official Information

- The name, title, company, and contact information of the individual authorized to issue the certification.

7. Signature and Date

- A signed and dated attestation confirming that the information provided is accurate and supported by documentation retained by the manufacturer or supplier.

These elements represent the minimum required content for a valid certification. Certifications that include generalized statements of compliance, lack shipment-specific traceability, or omit the required identifying or attestation information, do not satisfy NCDOT certification requirements.

Manufacturers and suppliers must retain supporting documentation, such as mill test reports, certificates of origin, or component cost information, when required for the material category. This documentation does not need to be submitted automatically, but it must be available to substantiate the basis for compliance if requested by the Contractor or Contract Administrator.

If a manufacturer or supplier determines that a shipment does not meet domestic material requirements, the manufacturer or supplier must promptly disclose that fact to the Contractor so appropriate action can be taken before the material is incorporated into the work. Certifications may be issued only after all applicable domestic material requirements have been satisfied.

For materials delivered in multiple shipments, manufacturers and suppliers may issue either (1) a shipment-specific certification for each delivery, or (2) a single certification covering the entire production lot, provided the certification clearly identifies the lot and allows the Contractor and Contract Administrator to trace each delivered portion back to that certification. Certifications that are ambiguous, lack shipment-specific traceability, or do not allow clear identification of the delivered material will not be accepted.

5.2 Recordkeeping and Traceability

Manufacturers and suppliers must maintain documentation that allows each certification to be clearly and unambiguously linked to the specific shipment of material provided for the project. The records must include the shipment-specific identifying information referenced in *Section 5.1 (Manufacturer/Supplier Self-Certification)* and must allow the certification, the delivered material, and the supporting documentation to be matched clearly and reliably.

Supporting documents, including mill test reports, certificates of origin, domestic manufacturing attestations, or component cost summaries, must be kept on file by the manufacturer or supplier and made available upon request to the Contractor, the Contract Administrator, or NCDOT until project closeout. These recordkeeping practices support certification traceability and may be reviewed for compliance and audit purposes.

5.3 Non-Compliance and Substitution Procedures

Manufacturers and suppliers are expected to notify the Contractor immediately if any material provided or intended to be provided does not meet applicable domestic material requirements. This includes situations in

which the material cannot be certified, when supporting documentation is incomplete or inconsistent, or when foreign components or manufacturing processes result in non-compliance under the applicable category.

Certifications are not issued for shipments that do not fully meet the applicable domestic content requirements. If non-compliance is identified after a certification has been issued, the manufacturer or supplier must promptly inform the Contractor and provide corrected documentation along with an explanation of the discrepancy.

When a material cannot be certified as compliant, the Contractor, working with the manufacturer or supplier, must determine whether a compliant substitute is available. Any substitute must meet the same functional, performance, and specification requirements as the originally specified item and must be approved by the Engineer before incorporation into the work.

5.3.1 Note on De Minimis Treatment

The FHWA de minimis allowance for iron and steel, and the U.S. DOT- Waiver of Buy America Requirements for De Minimis Costs and Small Grants for construction materials and manufactured products are agency-controlled policies. Manufacturers and suppliers should not assume that a material qualifies for de minimis treatment and must not certify non-compliant materials on that basis. Any determination that a material may fall under a de minimis allowance must be reviewed and approved at the project level through NCDOT and FHWA processes. Manufacturers and suppliers must continue to disclose non-compliance in accordance with these procedures.

Chapter 6 — Contractor Requirements

6.1 Contractor Affirmation (Pre-Construction)

Before materials are incorporated into the project, and typically at or before the Preconstruction Conference, the Contractor must submit a completed Domestic Material Compliance Affirmation to the Contract Administrator. A sample form is provided in *Appendix E (Sample Prime Contractor Domestic Material Compliance Affirmation)*. As required by Subarticle 106-1(B) of the *Standard Specifications*, this affirmation establishes that the Contractor understands and accepts all responsibilities associated with federal and state domestic material requirements, including those in 23 USC Section 313, 23 CFR 635.410, 2 CFR Part 184, NCGS. Section 136-28.7, and any contract-specific provisions.

Through this affirmation, the Contractor attests that it will ensure the accuracy and completeness of all domestic material certifications received from manufacturers and suppliers before any material is incorporated into the work or included in a request for payment. The affirmation also reflects the Contractor's obligation to maintain internal controls so that no iron or steel products, construction materials, or manufactured products are used on the project until the required documentation has been received and verified for compliance.

The affirmation further requires the Contractor to extend all applicable domestic material requirements to subcontractors and suppliers at every tier. This includes incorporating appropriate compliance language into subcontracts and collecting and transmitting all certifications for materials furnished by subcontractors or suppliers.

A Prime Contractor Domestic Material Compliance Affirmation (*Appendix E* or equivalent form of their own design) must be signed by an individual authorized to bind the Contractor and must be notarized. The notarization serves as a formal attestation that the Contractor has reviewed and understands its obligations. Submission of a complete, properly executed affirmation is necessary to support authorization to begin work.

6.2 Material Procurement and Submittals

As materials are procured and delivered to the project, the Contractor is responsible for securing complete and accurate domestic material certifications from each manufacturer or supplier before incorporating the material into the work or including any request for payment.

Certifications must identify the material, the applicable domestic material category, the project for which it is supplied, and provide clear traceability to the specific shipment through invoice information, bill-of-lading references, lot or heat numbers, or other shipment identifiers.

The Contractor must review each certification to ensure that it satisfies the requirements of Article 106-1 of the *Standard Specifications*, including confirming that the material has been properly classified and that the documentation affirms compliance with applicable federal or state domestic material requirements. Any certification that is incomplete, unclear, or missing required information must be resolved with the manufacturer or supplier before the material is incorporated into the work.

Certifications should be submitted to the Contract Administrator as materials arrive, or as they are made ready for incorporation. Submittals provided early in the procurement and installation process help ensure adequate time for review. Certifications that are incomplete, incorrect, or unverifiable may delay payment and may result in rejection of the material. The Contractor remains responsible for the accuracy and completeness of all domestic material documentation, including documentation associated with subcontractors or secondary suppliers.

Materials that do not meet applicable domestic content requirements must not be incorporated unless the Contract Administrator has reviewed the circumstances and provided written direction. If non-compliant materials are installed without prior disclosure and approval, the Department may require removal, replacement, or other corrective actions at the Contractor's expense, and federal reimbursement may be affected.

Failure to obtain and submit required certifications may affect payment, authorization of work involving the affected materials, or other contract actions permitted under the contract.

6.3 Certification Submission and Timing

Domestic material certifications must be submitted early enough for the Contract Administrator to review and accept the documentation before the Contractor includes the associated materials in any request for payment. Certifications should generally be provided as materials are delivered to the project or as they are prepared for installation so that verification can occur without affecting payment schedules or construction progress.

Each certification must correspond to the specific shipment being supplied. When materials are delivered in multiple shipments, the manufacturer or supplier may issue either a separate certification for each shipment, or a single certification covering an entire production lot, provided the documentation clearly identifies the lot and allows the Contract Administrator to trace each delivered portion back to that certification. Certifications that are ambiguous or not shipment-specific do not satisfy the requirements of Article 106-1 of the *Standard Specifications*.

If a pay request includes materials for which certification has not yet been received and accepted, those materials will be excluded from the estimate until proper documentation is reviewed and approved by the Contract Administrator. Certifications submitted after installation, after the pay period has closed, or in bulk near the end of the project, are inconsistent with the requirements of Article 106-1 of the *Standard Specifications* and may delay payment until shipment-specific documentation is provided.

The Contractor is responsible for coordinating certification submissions from all subcontractors and suppliers to ensure that documentation is timely, complete, and accurately linked to each shipment delivered to the project. Timely submission supports traceability, maintains compliance throughout the project, and allows the Contract Administrator to confirm eligibility for federal and state participation before payment is made.

6.4 Subcontractor/Supplier Oversight

The Contractor is responsible for ensuring that all subcontractors, suppliers, manufacturers, and lower-tier vendors comply with the domestic material requirements applicable to the project. This responsibility includes communicating federal and state obligations before work begins and incorporating appropriate compliance language into all subcontract agreements. Subcontractors must understand that materials they furnish cannot be incorporated into the project or included in any request for payment unless they are accompanied by complete shipment-specific domestic material certifications.

The Contractor must ensure that subcontractors obtain and provide accurate manufacturer or supplier certifications for all materials they furnish. These certifications must be transmitted early enough for the Contractor to review them for completeness, accuracy, and compliance before submission to the Contract Administrator.

The Contractor remains fully responsible for verifying that all materials furnished through subcontractors or lower-tier suppliers meet applicable domestic content requirements.

If a subcontractor fails to submit proper documentation, provides incomplete or unclear certifications, or furnishes materials that appear non-compliant, the Contractor must resolve the issue before the material is incorporated into the work or included in a pay request. A subcontractor's failure to comply does not relieve the Contractor of any contractual obligations to NCDOT.

Throughout the project, the Contractor should maintain regular communication with subcontractors and suppliers to confirm delivery schedules, clarify documentation requirements, and ensure that each tier of the supply chain understands its role in supporting domestic material compliance. Proactive coordination helps avoid delays, prevents installation of non-compliant materials, and maintains consistency with the requirements of Article 106-1 of the *Standard Specifications*.

6.5 Recordkeeping and Audit Readiness

Throughout the project, the Contractor must maintain the domestic material certifications received from manufacturers and suppliers so that documentation remains complete and traceable through final acceptance and project closeout. These records provide an internal assurance mechanism for the Contractor and support timely resolution of any questions that may arise during construction.

The Contractor's recordkeeping obligations apply only for the duration of the contract and include shipment-specific certifications submitted for review, the notarized Domestic Material Compliance Affirmation, and any clarification or correspondence generated in connection with domestic material compliance. The Contractor is not required to retain underlying manufacturer documentation, such as mill test reports or component cost information, unless those documents were submitted as part of the certification package.

After NCDOT accepts the project and the contract is closed out, NCDOT assumes responsibility for maintaining all required documentation for state and federal audit purposes. The Contractor is not required to retain domestic material records beyond contract closeout unless a specific contract provision requires otherwise.

Chapter 7 — Contract Administrator Responsibilities

7.1 Verification of Contractor Affirmation

Before construction begins, the Contract Administrator is responsible for verifying that the Contractor has submitted a complete and notarized Domestic Material Compliance Affirmation, a sample of which is provided in *Appendix E (Sample Prime Contractor Domestic Material Compliance Affirmation)*, as required under Subarticle 106-1(B) of the *Standard Specifications*. This affirmation establishes the Contractor's acknowledgment of all applicable federal and state domestic material requirements, and its responsibility for ensuring that materials incorporated into the project are properly certified.

The Contract Administrator must review the affirmation to confirm that it has been signed by an authorized representative of the Contractor, includes all required information, and contains a valid notary acknowledgment. If the affirmation has not been submitted, is incomplete, or is improperly executed, the Contract Administrator must notify the Contractor. Payment should not proceed until a fully executed and notarized affirmation is received.

A copy of the affirmation must be retained in the project records within the Domestic Material folder.

7.2 Review and Tracking of Certifications

Domestic material certifications are reviewed and tracked through the same workflow used for Materials Received Reports (MRRs). Incorporating certification review into the MRR process ensures consistent verification, traceability, and pay-record support for all materials delivered to the project.

The Contract Administrator verifies that any material requiring domestic material documentation is supported by complete and acceptable certification before it is included in a pay estimate. Certifications must be reviewed promptly upon receipt to verify they are complete, accurate, compliant with Article 106-1 of the *Standard Specifications*, and traceable to the materials documented through MRRs.

Each certification must clearly correspond to the material delivered. As part of the review, the Contract Administrator verifies:

- The identification and classification of the material.
- The required domestic content compliance statements for the applicable category.

- Consistency of supplier or manufacturer information with the associated MRR.
- Any Buy America or Build America, Buy America (BABA) documentation tied to the shipment.

If a certification is missing, incomplete, or inconsistent with the corresponding MRR or weigh ticket, the Contract Administrator must notify the Contractor and require correction before the material is included in a monthly estimate.

All certifications must be maintained within the project file in a manner that aligns with MRR documentation, ensuring traceability between the MRR, the certification, the associated pay item and quantity, and the resulting payments, over the life of the project.

Through this integrated review and tracking process, the Contract Administrator helps ensure that only compliant materials are incorporated into the work and that documentation remains sufficient for federal and state audit and reimbursement purposes.

7.3 Escalation of Unresolved Documentation Issues

If a material's domestic material documentation cannot be verified through normal review of certifications, MRRs, or certified weigh tickets, the Contract Administrator must elevate the matter through the established chain of communication, beginning with the Area Construction Engineer. The issue will then be referred to the Materials and Tests Unit, as appropriate, for further evaluation. The Materials and Tests Unit provides the final determination regarding material classification or compliance under Article 106-1 of the *Standard Specifications*.

7.4 Documentation in Project Records

The Contract Administrator is responsible for maintaining domestic material documentation within the official project records. Certifications must be filed with the corresponding MRR in the project's MRR folder to ensure each certification is directly associated with the documented delivery and the related pay item. This organization allows certifications, MRRs, weigh tickets, and payment records to be reviewed together during estimates, audits, and project closeout.

All other domestic material documentation, including the Contractor's notarized Domestic Material Compliance Affirmation, related

correspondence, records of escalated issues, and any applicable waivers, must be maintained in the project's Domestic Material folder.

Maintaining orderly and comprehensive project records is essential for demonstrating compliance with federal and state domestic material requirements and for ensuring that incorporated materials remain eligible for payment and federal reimbursement.

7.5 Handling Non-Compliant Materials

When domestic material documentation is missing, incomplete, inconsistent with the delivered material, or demonstrates that the material does not satisfy applicable federal or state domestic material requirements, the Contract Administrator must ensure that the associated material is not included in any pay estimate. The Contract Administrator must inform the Contractor of the deficiency so that corrected documentation or a compliant substitute can be provided.

In any instance in which payment is withheld or documentation is deemed unacceptable, the Contract Administrator must notify the Contractor and document the communication in the project's correspondence files to maintain a clear record of the issue and its resolution.

Chapter 8 — Waivers and Exceptions

8.1 Types of Waivers and Exceptions Under Federal Domestic Material Requirements

Federal domestic material requirements are intended to be satisfied through compliant design, specification, and procurement. Waivers and exceptions are limited relief mechanisms established by statute, regulation, or policy and are not intended to function as routine compliance tools. As reflected in federal policy and program administration, statutory waivers are granted only in limited circumstances and should be treated as narrowly applied relief mechanisms rather than standard project options.

Federal domestic material requirements apply to iron and steel, construction materials, and manufactured products used in federal-aid highway projects. Relief from these requirements is limited to specific authorities established under federal statute, regulation, and agency policy. These authorities fall into three distinct categories, each of which serves a different function and carries different procedural implications. Understanding the differences among these categories is essential for determining when relief may be available and how it must be applied.

These relief mechanisms fall into three categories: statutory waivers, general or categorical waivers, and administrative or regulatory policies. Although these mechanisms share the common effect of providing limited relief from otherwise applicable domestic preference requirements, they differ fundamentally in purpose, applicability, and process.

8.1.1 Statutory Waiver Authority

Statutory waivers are the legal bases that allow the Federal Highway Administration (FHWA) to waive domestic material requirements in limited circumstances. Federal law permits waivers only under three conditions: public interest, non-availability, and unreasonable cost. These statutory bases explain why a waiver may be considered; they do not dictate the form of the waiver or whether it applies to a single project or to a broader category of projects or materials. A detailed discussion of statutory waivers and their use on project-specific requests is provided in *Section 8.2 (Statutory Waiver Requests)*.

8.1.2 General or Categorical Waivers

General or categorical waivers are waivers issued broadly by FHWA or the United States Department of Transportation (USDOT) that apply to a class of

products, materials, or projects without requiring project-specific action. Although these waivers relieve compliance for multiple projects or material types, they must still be based on one of the statutory waiver bases described above. They undergo public notice and comment, are published in the *Federal Register*, and they are subject to periodic review, generally at least every five years.

Examples relevant to NCDOT include:

- **Manufactured Products General Waiver (1983–2025).** For several decades, FHWA waived Buy America requirements for manufactured products. This general waiver was terminated through FHWA’s 2025 final rule, with phased implementation of domestic requirements for manufactured products beginning on October 1, 2025, and October 1, 2026.
- **DOT-Wide De Minimis and Small-Grants Waiver (August 16, 2023 - present).** This categorical public interest waiver provides limited relief for construction materials and manufactured products when the total amount of federal financial assistance applied to the project is below \$500,000, or when the total value of non-compliant products does not exceed the lesser of five percent of applicable material cost or one million dollars.
- **FHWA Temporary Waiver for Construction Materials (May 14, 2022 - Nov 10, 2023).** This time-limited waiver provided transition relief during early Build America, Buy America (BABA) implementation and applied only to projects obligated during a defined period.

General waivers relieve compliance for a defined group of projects or materials. When a general waiver applies, NCDOT does not seek a project-specific waiver; instead, NCDOT must ensure that project conditions clearly fall within the scope of the issued waiver.

8.1.3 Administrative or Regulatory Policies (Exceptions That Are Not Waivers)

Some exceptions are not waivers at all. Instead, they arise from FHWA’s interpretation or administration of compliance, where FHWA determines that certain minimal uses or circumstances may be treated as acceptable without issuance of a statutory or categorical waiver. These interpretations do not rely on statutory waiver authority, do not undergo the public notice process

applicable to waivers, and may be applied directly by NCDOT when the stated conditions are met.

The most significant example for NCDOT is the FHWA Iron and Steel De Minimis Policy. Under this policy, as reflected in 23 CFR 635.410(b)(4), FHWA considers Buy America requirements satisfied when the combined cost of all non-compliant iron and steel permanently incorporated into a project is less than 0.1 percent of total contract cost or \$2,500, whichever is greater. This allowance is not a statutory waiver, is not a categorical waiver, and does not require publication in the *Federal Register*. Rather, FHWA treats de minimis quantities of foreign iron and steel as administratively negligible for compliance purposes. When the de minimis threshold is not exceeded, NCDOT may apply the policy directly as part of normal contract administration.

Administrative policies establish that limited noncompliance is acceptable within different thresholds or circumstances and does not require a separate waiver.

8.1.4 Summary

In summary, statutory waivers establish the legal authority for granting relief, general or categorical waivers define how that relief is applied across projects or materials, and administrative or regulatory policies describe limited circumstances in which compliance may be administered without issuance of a waiver. Distinguishing among these mechanisms is essential for applying domestic material requirements correctly.

8.2 Statutory Waiver Requests

Federal law permits domestic preference requirements to be waived only under specific statutory conditions. These waivers, when applied to an individual project, are commonly referred to as project-specific waivers. These statutory waiver bases appear in 23 USC Section 313(b) for iron and steel and manufactured products, and in Section 70914(b) of the BABA Act for construction materials and manufactured products. The procedures governing the request, review, and approval of statutory waivers are set out in 2 CFR 184.7, 2 CFR 200.322, and 23 CFR 635.410(c).

A statutory waiver is the only mechanism through which relief from otherwise applicable domestic material requirements may be granted for an individual project. Other forms of exception, such as general or categorical waivers or FHWA administrative policies, do not substitute for a statutory

waiver when a project seeks exemption from otherwise applicable domestic material requirements.

8.2.1 Statutory Waiver Bases

A statutory waiver may be granted only when one of the following conditions is satisfied:

1. Public Interest

- A waiver may be granted when application of the domestic preference would be inconsistent with the public interest.
- This basis is applied narrowly and only in circumstances where compliance would significantly impede essential public needs or project objectives.
- Examples may include emergency or safety considerations, critical operational requirements, interoperability constraints, or other conditions where domestic sourcing would materially impair transportation system performance.

2. Non-Availability

- A waiver may be granted when compliant domestic materials are not produced in the United States, are not reasonably available in sufficient quantities, or are not available in satisfactory quality.
- This basis requires documented evidence demonstrating outreach to domestic manufacturers and suppliers, confirmation of material availability constraints, and evaluation of feasible alternatives.

3. Unreasonable Cost

- A waiver may be granted when the use of compliant domestic materials would increase the total project cost by more than 25 percent.
- This basis applies to materials covered under applicable statutory authority, including iron and steel under 23 USC Section 313 and as implemented through FHWA's 2025 rule, manufactured products. Application of this basis must be consistent with governing federal statutes, regulations, and agency guidance in effect at the time of the request.
- Because FHWA expects agencies to evaluate design modifications, schedule adjustments, and material substitutions before relying on this basis, unreasonable-cost waivers are rarely approved.

These statutory waiver bases define the circumstances under which relief may be considered, but they do not dictate the form of the waiver or whether it applies to a single project or to a broader class of projects or materials.

8.2.2 Rarity of Statutory (Project-Specific) Waivers

Statutory waivers applied to individual projects (project-specific waivers) are uncommon and subject to significant scrutiny. FHWA and the Office of Management and Budget's Made in America Office (MIAO) have emphasized through formal guidance, memoranda, and related interpretive materials that waiver requests must be narrowly scoped, well supported, and pursued only after domestic sourcing constraints have been thoroughly evaluated.

Federal agencies expect material availability and compliance considerations to be addressed during project development rather than during construction. Accordingly, project development is expected to proceed on the assumption that statutory waivers are unlikely to be approved and that domestic compliance will be required. NCDOT administers projects with the expectation that domestic compliance will be achieved without reliance on project-specific waivers.

8.2.3 Timing Considerations for Statutory (Project-Specific) Waiver Requests

Under 2 CFR 184.7, every statutory waiver applied to an individual project (project-specific waiver) is subject to FHWA and MIAO review and must be published in the *Federal Register* for public comment before it becomes effective.

Because a waiver is effective only after completion of this process, project-specific waivers are generally not feasible for active construction contracts.

As a result, project-specific waiver requests are expected to be identified and initiated during project development, well in advance of advertisement. Waiver requests are not typically pursued for advertised, awarded, or executed contracts, unless extraordinary circumstances exist and FHWA directs otherwise. This approach supports procurement integrity, provides clarity to bidders, and aligns with federal expectations for early identification of material sourcing risks given the required federal review and public notice process.

8.2.4 Required Documentation for a Statutory Waiver Request

A request for a statutory waiver must be supported by comprehensive, verifiable documentation. NCDOT must compile and submit the following information to FHWA through its Division Office:

1. Material Identification and Classification

- Documentation describing the material or product, its intended use and project location, applicable quantities and specifications, and its classification under 2 CFR 184 and 23 CFR 635.410(c) in accordance with the Single Classification Rule.

2. Market Research Documentation

- Documentation demonstrating reasonable efforts to identify domestic materials, including identification of domestic manufacturers and suppliers contacted, price quotes and delivery information, responses or non-responses received, technical evaluations of alternatives, and evidence that domestic materials cannot meet schedule, quality, or performance requirements. Unsupported assertions of unavailability are not sufficient.

3. Justification Based on the Applicable Statutory Basis

- Submissions must include documentation appropriate to the statutory basis being invoked.
 - **Non-Availability:** For non-availability, this includes evidence that compliant domestic production does not exist or cannot meet project needs and an explanation of why alternatives or design modifications are not feasible.
 - **Unreasonable Cost:** For unreasonable cost, this includes comparative pricing demonstrating a cost increase exceeding 25 percent.
 - **Public Interest:** For public interest, this includes an explanation of adverse impacts to safety, operations, scheduling, or system performance and documentation showing why narrower measures would not mitigate the concern.

4. Project Documentation

- Relevant plans, specifications, estimates, schedule constraints, delivery considerations, environmental or regulatory factors, and alternatives evaluated with reasons for rejection.

5. Scope and Duration of the Requested Waiver

- Identification of the specific items for which relief is requested, proposed limitations to ensure the waiver is narrowly tailored, and measures NCDOT will implement to prevent broader application.

8.2.5 FHWA and OMB Review Process

Once NCDOT submits a complete waiver package, the federal review process generally includes the following steps:

1. FHWA Division Office review and coordination with FHWA Headquarters;
2. MIAO review;
3. Publication of the proposed waiver in the *Federal Register* for public comment;
4. Evaluation of comments; and
5. Publication of the final waiver.

A statutory waiver becomes effective only upon publication of the final waiver. NCDOT should not advertise or award a contract in reliance on a statutory waiver unless and until the final waiver has been issued.

8.2.6 Practical Implications for NCDOT

Because project-specific statutory waivers involve extensive documentation and prolonged federal review, they are not considered a practical mechanism for addressing domestic material issues identified during construction. Material sourcing challenges are expected to be identified and evaluated during project development, and projects are planned with the expectation that statutory waivers will rarely be granted.

Within this framework, maintaining compliance with federal domestic material requirements requires early coordination with the Materials and Tests Unit and Central Construction Unit, thorough documentation of procurement challenges during design, and confirmation of domestic availability before specifying proprietary or foreign-manufactured items.

8.3 DOT-Wide De Minimis and Small-Grants Waiver

In August 2023, USDOT issued a general applicability waiver under its public-interest authority for the BABA Act. This waiver provides limited relief from BABA requirements for construction materials and manufactured products under specific funding and cost thresholds. The waiver applies to all DOT operating administrations, including FHWA, and remains the only active general or categorical waiver relevant to NCDOT's federal-aid construction program.

This waiver does not apply to iron and steel, which remain subject to the requirements of 23 USC Section 313 and 23 CFR 635.410, including FHWA's separate de minimis policy.

The waiver is structured around two alternative conditions. If either condition is met, the waiver may be applied to provide relief from BABA requirements for construction materials and manufactured products on that project.

1. Small-Grants Threshold

- Under the first condition, a project qualifies if the total amount of federal financial assistance for the project is less than \$500,000.
- In such cases, BABA requirements for construction materials and manufactured products do not apply.
- This condition is expected to be most relevant to small municipal projects or minor federal-aid activities delivered outside of NCDOT highway construction contracts.

2. De Minimis Threshold

- The second condition provides relief when the total cost of non-compliant construction materials and manufactured products proposed for incorporation into a project does not exceed the lesser of:
 - Five percent of the total applicable material cost; or
 - One million dollars.
- "Applicable material cost" includes only those materials subject to BABA requirements.
- It excludes iron and steel subject to 23 USC Section 313, as well as materials excluded under BABA Section 70917(c), including cement, aggregates, and binding agents.

Because most NCDOT projects substantially exceed these thresholds, this condition applies infrequently within NCDOT's program. Nevertheless, the waiver remains available for qualifying projects and must be applied correctly when relevant.

8.3.1 Application and Documentation Requirements

Because the waiver is issued by USDOT, it does not require a project-specific waiver request. However, NCDOT must document that the project meets the applicable eligibility thresholds and coordinate with FHWA, as appropriate, to confirm proper application.

At minimum, documentation should include:

- Identification of the construction materials or manufactured products that would be noncompliant with BABA requirements.
- Itemized cost information necessary to calculate the applicable material cost and the percentage represented by non-compliant items.
- Confirmation that no iron or steel products are included within the scope of the waiver and that all iron and steel remain fully compliant under 23 USC Section 313.

NCDOT should coordinate with FHWA to confirm eligibility and ensure consistent application of the waiver. Until eligibility is confirmed, all applicable materials should be assumed to be subject to full BABA requirements.

8.3.2 Programmatic Considerations for NCDOT

Within NCDOT's federal-aid program, the waiver is likely to apply only in limited circumstances, such as qualifying Local Public Agency (LPA) projects or for projects where the value of BABA-covered materials is relatively low compared to total construction cost. The waiver is not intended to provide broad or routine relief from BABA requirements and should only be applied when project conditions clearly meet the defined thresholds.

When evaluating whether the waiver applies, staff should carefully assess the project's anticipated material costs, ensure proper classification of materials, and verify that any proposed use of the waiver is supported by adequate documentation. Because the waiver does not apply to iron and steel, and most NCDOT projects incorporate significant quantities of iron and steel components, the availability of this waiver does not reduce or modify NCDOT's Buy America obligations under 23 USC Section 313.

8.3.3 Alignment with Project Development and Compliance Expectations

The DOT-wide waiver is intended to streamline compliance for small projects or projects with minimal use of BABA-covered materials. It does not alter NCDOT's responsibility to classify materials correctly under 2 CFR 184 and 23 CFR 635.410(c), nor does it remove any other domestic preference obligations.

When a project does not clearly meet the waiver thresholds, NCDOT should default to full compliance with BABA requirements. Application of the waiver should be confirmed early in project development to ensure that contract documents reflect the correct domestic material requirements and that bidders receive unambiguous compliance instructions.

8.4 Iron and Steel De Minimis Policy Allowance

Federal regulation at 23 CFR 635.410(b)(4) permits a limited, incidental use of foreign iron or steel in federal-aid highway projects without violating Buy America requirements. This provision, often referred to as the "Iron and Steel De Minimis Allowance," has been part of FHWA's implementation framework since the early 1980s.

FHWA treats this allowance as an interpretation of compliance rather than a waiver. Accordingly, it does not require *Federal Register* publication and does not rely on any of the statutory waiver authorities described in *Section 8.2 (Statutory Waiver Requests)*.

The allowance recognizes that extremely small or incidental quantities of foreign iron and steel may occasionally be incorporated into a project, even when full Buy America compliance is intended. When the value of such foreign material falls below the prescribed threshold, FHWA considers the project to remain compliant.

8.4.1 Scope of the De Minimis Allowance

A project may incorporate a limited amount of foreign iron or steel only when all of the following conditions are met:

- The total cost of all foreign iron and steel products incorporated into the project does not exceed 0.1 percent of the total contract cost or \$2,500, whichever is greater.
- The cost is measured as the delivered value of the foreign material, including all manufacturing processes performed prior to incorporation into the project.

If the value of foreign iron or steel exceeds this threshold, the de minimis allowance may not be used to justify incorporation of foreign iron or steel on the project.

This provision applies only to iron and steel items subject to 23 USC Section 313. It does not apply to construction materials or manufactured products as defined in 2 CFR 184.

8.4.2 Determining the Cost of Foreign Iron and Steel

The cost of foreign iron or steel is determined by the full value of the non-domestic product as it is delivered to the project site. This includes:

- The entire value of any steel product that has undergone any manufacturing process outside the United States, even if the raw steel originated domestically.
 - For example, U.S.-sourced billet that is shipped overseas for rolling or forming results in a finished product considered entirely foreign.
- For assemblies containing foreign iron or steel, the cost considered under this provision includes the value of the foreign iron or steel component as delivered to the project.

This approach ensures that the de minimis allowance is limited to truly incidental quantities and is not used to incorporate significant foreign iron or steel through assemblies or mixed-origin components.

8.4.3 Application in NCDOT Projects

Within NCDOT's federal-aid program, the de minimis provision is expected to apply only to incidental, low-value items. It should not be used as a planned compliance strategy or as a justification for sourcing non-domestic steel.

For contract administration purposes:

- The Contractor must disclose and document all foreign iron and steel proposed for incorporation, including invoices or other cost documentation sufficient to determine delivered value.
- The Contract Administrator must verify that the total value of foreign iron and steel remains below the threshold as part of normal contract administration prior to acceptance.
- The provision should be applied only when the foreign content is truly incidental and unavoidable.

Examples of items that may qualify, depending on total value, include small quantities of incidental hardware or minor steel elements unintentionally supplied from foreign stock. Items not appropriate for use under this provision include rebar, structural steel, prestressing strand, bearings, anchors, steel plate components, or any foreign steel knowingly purchased for the project.

8.4.4 Key Considerations for Contract Administration

Use of the de minimis allowance does not alter the underlying requirement that all iron and steel products must be of domestic origin unless the total cost of foreign content falls below the defined threshold. The allowance is intended to address unavoidable minor quantities, not to create flexibility in procurement.

For NCDOT:

- Full Buy America compliance must always be the default expectation.
- The de minimis allowance may only be applied after confirming that the project remains within the threshold and that the foreign steel use is incidental.
- Contractors are responsible for providing sufficient documentation to support any use of the de minimis allowance under 23 CFR 635.410(b)(4).

8.5 NCDOT Roles and Responsibilities for Waivers and Exceptions

Waivers and exceptions under federal domestic material requirements involve significant compliance and programmatic risk. Because waiver-

related actions are centrally managed within NCDOT, this section explains how potential waiver issues are identified, evaluated, documented, and transmitted to FHWA. Additionally, this section clarifies the roles of NCDOT staff, consultants, contractors, and subrecipients involved in this process.

8.5.1 Identification and Initial Evaluation

Potential domestic sourcing concerns may be identified during project development, design, or contract preparation. When such concerns arise, the issue is documented with available information and elevated to the Materials and Tests Unit for initial evaluation. Until formal authorization is provided, no commitments, assumptions, or representations regarding waiver eligibility or approval are made or communicated.

Contract Administrators, Division staff, consultants, and municipal owners do not determine whether a waiver will be pursued and do not represent to contractors, vendors, or other external stakeholders that a waiver will be granted or pursued. Potential domestic material concerns may be identified and discussed for evaluation, but no commitments or assurances regarding waiver eligibility are made without formal authorization.

8.5.2 Authority to Pursue a Waiver

Authority to authorize the pursuit of a statutory waiver or the application of the DOT-wide De Minimis and Small-Grants Waiver is vested in the NCDOT Chief Engineer. Before the Chief Engineer considers authorization, the Materials and Tests Unit reviews the issue and provides an evaluation that includes a recommendation on whether a waiver is appropriate, a material classification determination under 2 CFR Part 184 and 23 CFR 635.410(c), and an assessment of whether design modifications, substitutions, or alternative procurement strategies could avoid the need for a waiver.

For application of the DOT-wide waiver, this review also includes confirmation that the project meets applicable threshold requirements and that all iron and steel remain fully compliant. No other NCDOT unit may authorize the pursuit of statutory waivers or initiate discussions with FHWA regarding waiver requests.

8.5.3 Submission of Waiver Requests to FHWA

Formal requests to FHWA, whether for a statutory waiver or to confirm applicability of the DOT-wide De Minimis and Small-Grants Waiver, are transmitted directly by the Chief Engineer or an explicitly delegated designee.

All formal waiver-related communications with FHWA, including coordination with the FHWA Division Office, are conducted through the Chief Engineer's Office or an authorized designee.

8.5.4 Documentation Requirements and Recordkeeping

For any waiver-related action, the project file includes material classification determinations, market research, supplier communications, internal NCDOT evaluations, waiver request packages, FHWA and MIAO correspondence, and final determinations, including *Federal Register* publications for statutory waivers. This documentation forms part of the official project record and is retained in accordance with NCDOT and FHWA requirements. Subrecipients administering federal-aid projects follow the same documentation and retention standards.

8.5.5 Contractor and Consultant Roles

Contractors, vendors, and consultants may provide supporting information, such as pricing, technical data, delivery schedules, or documentation of manufacturing origin, and may assist in developing documentation associated with domestic material compliance and potential waiver considerations.

Contractors and vendors do not make waiver determinations and do not independently represent NCDOT in communications with FHWA or the Office of Management and Budget (OMB).

Consultants may support evaluation, documentation, and coordination activities when acting within an authorized scope of work; however, all waiver determinations, submittals, and official communications with FHWA or OMB are conducted with NCDOT oversight.

8.5.6 Summary

In summary, potential waiver issues may be identified at any stage of project development, but authorization and federal coordination are centralized to ensure statewide consistency and protect procurement integrity. Authority to pursue statutory waivers or apply the DOT-wide De Minimis and Small-Grants Waiver resides with the Chief Engineer, and all federal communications are conducted through the Chief Engineer's Office. Contractors and consultants may support documentation development, but do not participate in waiver determinations or federal coordination.

Chapter 9 — Conclusion

9.1 Summary of Compliance Framework

The North Carolina Department of Transportation (NCDOT's) domestic material compliance framework integrates federal and state requirements into a unified process governing the classification, certification, verification, and documentation of all materials incorporated into transportation construction contracts.

Federal obligations under 23 USC Section 313, 23 CFR 635.410, and the Build America, Buy America (BABA) Act (as implemented through 2 CFR Part 184) apply to all federal-aid projects, while state law (NCGS Section 136-28.7) extends iron and steel requirements to all NCDOT contracts regardless of funding source.

This guidance describes the responsibilities of manufacturers, suppliers, Contractors, subcontractors, and Contractor Administrators staff in administering these requirements. Materials incorporated into the work are expected to be correctly classified under the Single Classification Rule, supported by shipment-specific certification, reviewed and verified before payment, and documented in a manner that maintains traceability throughout the project.

NCDOT's established administrative processes include the Materials Received Report (MRR) workflow and the Domestic Material Compliance Affirmation (*Appendix E* or equivalent). The Contract Administrator's review of MRRs and affirmations, with support from the Area Construction Engineer, Central Construction Unit, and Materials and Tests Unit as needed, provides the structure necessary for consistent compliance during construction.

Consistent application of this framework supports conformity with federal and state requirements, protects eligibility for federal participation, and strengthens the Department's stewardship responsibilities by maintaining complete and reliable project records for oversight reviews and audits.

9.2 Contacts for Assistance

Questions regarding domestic material requirements, classification, certification, or documentation should be directed to the appropriate NCDOT unit or Federal Highway Administration office listed below. These points of contact provide technical assistance, policy interpretation, and support for resolving compliance issues that arise during project development or construction.

NCDOT Construction Unit – Central Construction Office

Primary contact for contract administration requirements, interpretation of Article 106-1 of the *Standard Specifications*, and project-level compliance oversight.

Contact: Construction Unit Contact Us
Phone: 919-707-2400

NCDOT Materials and Tests Unit

Assists with material classification, technical evaluation of products, verification of domestic content documentation, and coordination for materials inspections or specialized reviews.

Contact: Materials and Tests Unit Contact Us
Email: BABA.Support@ncdot.gov
Phone: (919) 329-4000

NCDOT Contract Standards and Development Unit

Supports interpretation of *Standard Specifications*, special provisions, and project-specific domestic material requirements.

Email: specs@ncdot.gov
Phone: (919) 707-6910 or (919) 707-6916

FHWA North Carolina Division Office

Federal authority for the State of North Carolina to include domestic material compliance. Please note, the Chief Engineer or an authorized designee is the only individual who can contact this authority regarding Buy America and BABA questions, concerns, or waivers.

Contact: FHWA NC Division Contact Us
Phone: (919) 856-4346

*Appendix A —
Historical Timeline of
Federal and North
Carolina Domestic
Material Requirements*

Foreword

This timeline is provided for historical and contextual reference and is intended to illustrate the evolution of federal and state domestic material requirements applicable to transportation construction. It distinguishes between statutory authority, regulatory implementation, agency waivers, and enforcement milestones over time. Inclusion of a particular statute, regulation, or policy action does not imply consistent enforcement during the period shown and does not create retroactive compliance obligations.

Current domestic material requirements applicable to NCDOT projects are governed by the statutes, regulations, and approved statutory waivers in effect at the time of advertisement and contract execution. This timeline is explanatory in nature and does not supersede controlling federal or state law, regulation, or project-specific contract provisions.

November 6, 1978 — Section 401, Surface Transportation Assistance Act of 1978 (Public Law 95-599)

Summary

Congress enacted the first Federal Buy America requirement, prohibiting the U.S. Department of Transportation (USDOT) from using federal funds for highway or transit projects unless all unmanufactured and manufactured materials were produced in the United States, subject to limited waiver provisions.

This law marked the beginning of domestic preference requirements in transportation funding, authorizing exceptions for public interest, nonavailability, or excessive cost (10-percent differential). It established the foundation for modern Buy America rules and was later replaced by Section 165 of the 1982 Surface Transportation Assistance Act, which expanded coverage to steel, cement, and manufactured products.

January 6, 1983 — Section 165, Surface Transportation Assistance Act of 1982 (Public Law 97-424)

Summary

Congress enacted the modern Buy America statute, prohibiting USDOT from using federal funds on highway or transit projects unless all steel, cement, and manufactured products were produced in the United States. The law authorized limited waivers for public interest, nonavailability, or excessive cost (25-percent differential) and repealed the earlier 1978 provision.

Signed by President Ronald Reagan, this statute established the first comprehensive federal domestic material requirement for transportation projects and served as the foundation for the Federal Highway Administration's (FHWA) Buy America regulation at 23 CFR 635.410, finalized later in 1983.

November 25, 1983 — FHWA Final Rule: 23 CFR 635.410, Manufactured Products General Waiver

Summary

FHWA issued its final rule implementing Section 165 of the 1982 Surface Transportation Assistance Act, establishing the Buy America regulation at

23 CFR 635.410. This rule established the core federal domestic material requirements for iron and steel and introduced the Manufactured Products General Waiver, which exempted manufactured products from Buy America requirements unless they were predominantly composed of iron or steel.

FHWA determined that applying Buy America requirements to manufactured products was impractical and not in the public's interest. The waiver remained in place for over 40 years, until its termination in 2025.

May 3, 1984 — FHWA Amendment to 23 CFR 635.410, Removal of Cement and Aggregates

Summary

The Federal Highway Administration (FHWA) amended its Buy America regulation to remove cement, cementitious materials, and aggregates from Buy America coverage, following Congressional direction in Public Law 98-229. The change clarified that these materials are not subject to Buy America requirements.

This amendment aligned FHWA's regulation with legislative intent and has remained the standard since, as cement and aggregate materials have not been reinstated under Buy America.

July 14, 1989 — House Bill 399 (Session Law 1989-692): NCGS Section 136-44.8, Use of Domestic Materials in Highway Construction

Summary

The North Carolina General Assembly (NCGA) enacted the State's first Buy America statute requiring that steel and cement permanently incorporated into NCDOT highway construction or repair projects be produced in the United States. The law authorized written waivers when domestic materials were unavailable or unreasonably costly and aligned North Carolina policy with FHWA's Federal-aid Buy America requirements as implemented through 23 CFR 635.410.

This 1989 statute marked the beginning of state-level Buy America enforcement and laid the foundation for its later recodification under NCGS Section 136-28.7 in 2002.

July 21, 1993 — FHWA Amendment to 23 CFR 635.410, Addition of Iron Products

Summary

FHWA amended its Buy America regulation to explicitly include iron products within Buy America coverage alongside steel, consistent with the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA, Public Law 102-240).

This change formally extended Buy America coverage to iron products used in federal-aid highway projects and reinforced the domestic production standards already established for steel.

October 9, 2002 — House Bill 1518 (Session Law 2002-151): NCGS Section 136-28.7, Contract Requirements Relating to Construction Materials

Summary

NCGA modernized and recodified the State's Buy America statute, repealing NCGS Section 136-44.8 and reenacting its provisions within NCGS Section 136-28.7, which remains the governing law today.

The amendment retained the requirement that iron and steel permanently incorporated into NCDOT projects be produced in the United States and removed cement to remain consistent with FHWA's Buy America framework for federal-aid projects. It also expressly referenced 23 CFR 635.410(b)(4), aligning North Carolina's statute with FHWA's implementing regulation and establishing NCGS Section 136-28.7 as the continuing authority for NCDOT contract compliance.

August 10, 2005 — Section 1903, SAFETEA-LU (Public Law 109-59): Codification of Buy America as 23 USC Section 313

Summary

Congress recodified and reaffirmed the Buy America statute within Title 23 of the United States Code, establishing 23 USC Section 313 as the permanent legal authority for domestic material requirements on federal-aid highway projects.

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) maintained the existing requirements that iron, steel,

and manufactured products used in federal-aid projects be produced in the United States, subject to waiver provisions. This recodification provided statutory permanence, preserved FHWA's waiver authority, and remains the controlling basis for 23 CFR 635.410 and subsequent Buy America and Build America, Buy America (BABA) requirements.

February 17, 2009 — American Recovery and Reinvestment Act (Public Law 111-5, Section 1605)

Summary

The American Recovery and Reinvestment Act (ARRA) established temporary “Buy American” requirements applicable to iron, steel, and manufactured products used in ARRA-funded public works projects.

Although limited to the 2009 economic stimulus program and not incorporated into permanent federal-aid highway law under Title 23, ARRA introduced a broader domestic content framework that anticipated the expanded requirements later established under BABA in 2021.

July 6, 2012 — Section 1518, MAP-21 (Public Law 112-141): Expansion of Buy America Oversight

Summary

The Moving Ahead for Progress in the 21st Century Act (MAP-21) added 23 USC Section 313(g), clarifying that Buy America requirements apply on a project basis, not a contract-by-contract basis, when work is carried out within the scope of an approved National Environmental Policy Act (NEPA) decision.

Under this provision, Buy America applies to all contracts within the project, regardless of the funding source of individual contracts, when any portion of the project is funded with Title 23 federal-aid highway funds. MAP-21 did not expand the material categories covered by Buy America; it clarified project-wide applicability and strengthened the compliance posture for multi-contract projects.

2009–2020 — Period of Agency-Specific Buy America Waivers and Decentralized Oversight

Summary

During this period, individual transportation agencies, including FHWA, Federal Transit Administration (FTA), Federal Railroad Administration (FRA), and Maritime Administration (MARAD), issued product-specific, project-specific, and general waivers under their respective Buy America statutory authorities.

The absence of centralized, government-wide oversight and consistent tracking mechanisms resulted in variability in the application of domestic content requirements across federal programs. This environment highlighted the need for a more unified federal approach, setting the stage for BABA enacted in 2021.

January 25, 2021 — Executive Order 14005: Ensuring the Future Is Made in All of America by All of America’s Workers

Summary

President Biden issued Executive Order 14005, directing federal agencies to strengthen domestic preference requirements, expand the use of American-made materials, and reduce reliance on waivers.

The order established the Made in America Office (MIAO) within the Office of Management and Budget (OMB) to review proposed waivers and promote consistent application of domestic preference laws across agencies. This Executive Order marked the beginning of a government-wide initiative that culminated in the enactment of BABA later that same year.

June 11, 2021 — OMB Memorandum M-21-26: Increasing Opportunities for Domestic Sourcing and Reducing the Need for Waivers

Summary

OMB issued Memorandum M-21-26 directing federal agencies to review, justify, and reduce reliance on existing Buy America waivers. The memorandum required agencies to develop plans for addressing

longstanding general waivers and to improve transparency and public reporting of waiver activity.

This memorandum served as an early policy action implementing Executive Order 14005 and set the stage for the statutory expansion of domestic preference requirements in the Infrastructure Investment and Jobs Act (IIJA) later that year.

November 15, 2021 —BABA Enacted Under IIJA (Public Law 117-58, Sections 70901–70927)

Summary

BABA, enacted as part of IIJA, established government-wide domestic preference requirements for federally funded infrastructure projects. The law expanded domestic content requirements beyond iron and steel to include construction materials and manufactured products.

BABA directed federal agencies to apply consistent domestic preference policies, review and justify existing waivers, and develop implementation guidance within 180 days. These directives initiated phased implementation across federal programs beginning in 2022.

BABA also established the statutory framework for the modern three-category material structure, iron and steel, construction materials, and manufactured products, later defined and implemented through OMB regulations at 2 CFR Part 184.

April 18, 2022 — OMB Memorandum M-22-11: Initial Implementation Guidance on Application of the Build America, Buy America Act

Summary

OMB issued Memorandum M-22-11 providing the first government-wide guidance for implementing BABA. The memorandum directed federal agencies to begin applying BABA requirements effective May 14, 2022, subject to agency-specific implementation actions and any approved waivers. It also required agencies to review and justify existing waivers and to establish transparent public waiver processes.

The memorandum described the key material categories, iron and steel, manufactured products, and construction materials, and established the initial framework for agency-specific implementation plans that guided compliance until issuance of the final rulemaking in 2023.

May 14, 2022 – November 10, 2023 — FHWA Temporary Waiver for Construction Materials (87 FR 31931; extensions 87 FR 68475 & 88 FR 30163)

Summary

FHWA issued a temporary waiver of BABA construction material requirements to allow time for agency and industry implementation. The waiver applied only to construction materials and did not apply to iron, steel, or manufactured products.

The waiver was initially issued in May 2022 and extended twice before expiring on November 10, 2023, after which FHWA began full implementation of BABA construction material requirements for applicable federal-aid highway projects.

March 17, 2023 — FHWA Request for Information on Termination of Manufactured Products General Waiver (88 FR 16484)

Summary

FHWA published a Request for Information (RFI) seeking public input on the proposed termination of the 1983 Manufactured Products General Waiver. The notice invited feedback on potential impacts, market readiness, timing, and cost considerations associated with applying Buy America requirements to manufactured products.

This RFI represented an early formal step in FHWA's effort to align its Buy America regulation with BABA framework, which ultimately led to the 2025 Final Rule.

August 16, 2023 — USDOT General Applicability Waiver for De Minimis Costs and Small Grants (88 FR 55817)

Summary

The USDOT Office of the Secretary issued a department-wide general applicability waiver under BABA, providing limited relief for projects or

purchases of very small dollar value. The waiver applies to projects where the value of noncompliant construction materials and manufactured products does not exceed the lesser of \$1,000,000 or five percent of total applicable material costs, or when a project receives less than \$500,000 in total federal financial assistance.

The waiver does not apply to FHWA iron and steel requirements under 23 CFR 635.410 and excludes certain FRA and FTA programs. It applies across all USDOT operating administrations and remains subject to periodic review.

This waiver preceded the August 2023 OMB Final Rule and continues to operate within the regulatory framework established by 2 CFR Part 184 and FHWA's 2025 amendments to 23 CFR 635.410. It does not alter Buy America's project-level applicability under MAP-21 or FHWA's iron and steel requirements; rather, it provides limited relief from BABA compliance thresholds where applicable.

August 23, 2023 — OMB Final Rule: 2 CFR Parts 184 and 200, Buy America Requirements for Infrastructure Projects

Summary

OMB issued a government-wide Final Rule establishing 2 CFR Part 184, which implements BABA enacted under IIJA. The rule defines iron and steel products, manufactured products, construction materials, and Section 70917(c) materials, and establishes the Single Classification Rule to ensure each item fits only one material category.

Published August 23, 2023 (88 FR 57787) and effective October 23, 2023 (2 CFR 184.2(b)), the rule also amended 2 CFR Part 200 to require federal agencies and federal funding recipients to apply BABA's domestic preference standards. Together, these provisions established a uniform national framework later incorporated into FHWA's 2025 amendments to 23 CFR 635.410.

October 25, 2023 — OMB Memorandum M-24-02: Implementation Guidance on Application of Buy America Preference in Federal Financial Assistance Programs for Infrastructure

Summary

OMB issued Memorandum M-24-02, updating and expanding upon M-22-11 to align federal agencies with the final 2 CFR Part 184 framework. The memorandum directed agencies to review and re-justify any remaining general waivers and reaffirmed the applicability of domestic preference requirements to iron and steel, construction materials, and manufactured products. It also reinforced the Single Classification Rule (2 CFR 184.4(e)(2)) and outlined implementation expectations for manufactured products.

Phased Compliance Schedule

October 1, 2025: Manufactured products must be assembled in the United States.

October 1, 2026: Manufactured products must contain greater than 55 percent domestic component cost.

This memorandum remains the government-wide implementation guidance for BABA across all federal agencies.

March 12, 2024 — FHWA Request for Information: Use of Manufactured Products in Highway Projects (89 FR 17893)

Summary

FHWA published an RFI seeking input from manufacturers, suppliers, contractors, state DOTs, and other stakeholders on the domestic availability and manufacturing capacity of products commonly used in highway construction.

This RFI informed FHWA's evaluation of the 1983 Manufactured Products General Waiver and its efforts to align Buy America requirements with BABA and 2 CFR Part 184. Comments were due May 13, 2024. The RFI provided market data that informed FHWA's 2025 Final Rule, which formally ended the longstanding manufactured products waiver.

January 14, 2025 — FHWA Final Rule: Buy America Requirements for Manufactured Products (90 FR 2957)

Summary

FHWA issued its Final Rule formally terminating the Manufactured Products General Waiver that had been in place since 1983. The rule amends 23 CFR 635.410 to establish Buy America requirements for manufactured products, aligning FHWA policy with BABA and OMB's 2 CFR Part 184 framework.

Published January 14, 2025, and effective March 20, 2025, the rule integrates manufactured products into FHWA's existing domestic preference regulation alongside iron and steel, using definitions and structure consistent with the Single Classification Rule (2 CFR 184.4(e)(2)).

Phased Compliance Dates

October 1, 2025: Final assembly of manufactured products must occur in the United States.

October 1, 2026: Manufactured products must have greater than 55 percent of total component cost sourced domestically.

Impact

This rule represents FHWA's transition from its 1983 regulatory framework toward full implementation of BABA-aligned requirements, establishing the domestic content standards that will govern federal-aid highway projects. After October 1, 2026, the modern Buy America framework under 23 CFR 635.410, as aligned with 2 CFR Part 184, will be fully implemented for manufactured products.

October 1, 2025 — Manufactured Products: Final Assembly Requirement

Summary

FHWA implements the first phase of its Buy America requirements for manufactured products established in the January 14, 2025, Final Rule (90 FR 2957). Effective October 1, 2025, all manufactured products permanently incorporated into federal-aid highway projects must undergo final assembly in the United States.

This requirement represents the first implementation milestone in FHWA's two-phase schedule and provides a one-year transition period before the domestic component cost requirement takes effect. The second phase begins October 1, 2026, requiring manufactured products to contain greater than 55 percent domestic component cost.

October 1, 2026 — Manufactured Products: 55 Percent Domestic Component Requirement

Summary

FHWA implements the second and final phase of its Buy America requirements for manufactured products established in the January 14, 2025, Final Rule (90 FR 2957). Beginning October 1, 2026, all manufactured products permanently incorporated into federal-aid highway projects must undergo final assembly in the United States and contain greater than 55 percent domestic component cost.

This milestone completes FHWA's phased implementation of BABA-aligned requirements for manufactured products and establishes the full domestic content standard under 23 CFR 635.410, as aligned with 2 CFR Part 184.

*Appendix B —
NCDOT Domestic
Material Classification
Workflow*

Foreword

This workflow applies only to materials that are permanently incorporated into the completed facility and classify such materials based on their condition and configuration as delivered to the project site, consistent with 2 CFR 184.4(e). The workflow begins by identifying materials excluded under BABA Section 70917(c), followed by the standard classification sequence under 2 CFR Part 184.

STEP 1: Is the item a BABA Section 70917(c) material?

Build America, Buy America (BABA) Section 70917(c) materials are excluded when delivered in the form listed under 2 CFR 184.3, meaning the material is supplied in its basic, unformed state and not as part of a manufactured or assembled product:

- Cement and cementitious materials;
- Aggregates (stone, sand, gravel); and
- Aggregate binding agents or additives.

If YES

- Classify the item as a Section 70917(c) material – excluded from BABA domestic content requirements.
- No domestic content certification is required for the material itself.
- If the material is used as part of a larger product (e.g., precast concrete), the finished product may still be classified and evaluated under Steps 2–4; only the Section 70917(c) component remains excluded.

If NO

Proceed to Step 2

STEP 2: Is the item an iron or steel product?

Iron or steel products are items that consist wholly or predominantly of iron or steel, meaning the iron and steel content exceeds 50 percent of total component cost, as delivered to the project site.

Typical examples:

- Reinforcing steel (rebar, welded wire reinforcement, dowel bars);
- Structural steel beams, girders, diaphragms, plates, and shapes;
- Steel piling (H-pile, sheet pile); and
- Rebar couplers, castings, steel expansion devices, steel posts/guardrail components.

If YES

- Classify the item as an iron or steel product.
- All manufacturing processes (including melting, casting, rolling, forming, fabricating) must occur in the U.S.
- These requirements apply to all NCDOT projects, regardless of funding source, under NCGS Section 136-28.7.

If NO

**Proceed
to
Step 3**

STEP 3: Is the item a construction material?

If YES

- Classify the item as a construction material.
- For Federal-aid projects, all manufacturing processes for the material must occur in the U.S.

If NO

**Proceed
to
Step 4**

Construction materials consist of a single material type listed in 2 CFR 184.3, as delivered to the project site.

Covered construction material types:

- Non-ferrous metals (e.g., aluminum, copper, brass, zinc alloys)
- Plastic or polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables)
- Glass (including optical glass)
- Fiber optic cable (including drop cable)
- Optical fiber
- Lumber
- Engineered wood
- Drywall

Key checks:

- The item consists entirely of one listed material type; minor additives such as binding agents, dyes, or adhesives that do not materially alter the item's properties do not affect classification.
- The item is a single homogeneous product and is not combined with other material types to form a multi-component assembly. If the item is assembled or consists of multiple components, proceed to Step 4.

Examples:

- PVC or HDPE pipe and conduit made from a single resin are construction materials
- Single-pane glass is a construction material
- Lumber posts or timber members are construction materials
- Glass combined with aluminum framing is a manufactured product (see Step 4).

STEP 4: Is the item a manufactured product?

If YES

- Classify the item as a Manufactured Product.
- For Federal-aid projects:
 - Final assembly must occur in the U.S.; and
 - Beginning October 1, 2026, manufactured products must contain more than 55 percent domestic component cost, consistent with 23 CFR 635.410 and 2 CFR Part 184.

If NO

Proceed
to
Step 5

What is a manufactured product?

A manufactured product is an item, as delivered to the project site, that has been made from multiple components or materials into a finished product. If the item qualifies as an iron and steel product, a construction material, or a BABA Section 70917(c) material, it is not classified as a manufactured product.

Typical examples:

- Traffic signal, controllers, pedestrian push buttons
- LED luminaires, ITS cameras, communications equipment
- Light poles with internal wiring
- Concrete masonry units (CMU), concrete brick, clay brick
- Sign panels with applied sheeting
- Precast concrete boxes, vaults, manholes, noise-wall panels with embedded hardware
- Pre-hung doors or other multi-component assemblies

STEP 5:

Does the item fall outside the domestic material categories?

If, after applying Steps 1–4, the item does not clearly fit a domestic material category or meet the definition of a BABA Section 70917(c) material, answer the question below.

Is the item a biological, agricultural, or similar material that falls outside the domestic material categories?

If YES

- Treat the item as outside the domestic material categories.
- Domestic material certification is not required unless specifically required elsewhere in the contract.

Examples may include seed, straw, sod, fertilizer, live plants, trees, shrubs, or similar vegetation-establishment materials, provided they are not incorporated into a covered product or assembly.

If NO

- Escalate the item for NCDOT review.
- The Contractor shall submit the item and supporting information to NCDOT for review, including sufficient information to support classification under 2 CFR Part 184.
- The Materials & Tests Unit will make the final classification determination.
- Until classification is issued, document the item, the basis for uncertainty, and confirmation that the issue has been elevated for review.

*Appendix C —
NCDOT Permanent
Material Classification
Reference Chart*

Table C-1: NCDOT Permanent Material Classification Reference Chart

Material/Example	Category	Applicable Requirement	Notes/Examples of Application
Reinforcing steel, structural shapes, beams, girders, steel piling, rebar couplers, castings, expansion-joint angles	Iron & Steel	All steel processes — melting, casting, rolling, forming, coating — must occur in the U.S.	Applies to all NCDOT contracts under NCGS Section 136-28.7 and 23 CFR 635.410(b).
Aluminum bridge rail, copper grounding rods, brass fittings, zinc anodes	Construction Material (Non-Ferrous Metal)	All manufacturing processes must occur in U.S.	
PVC conduit, HDPE pipe (single-resin), polymer rebar supports, plastic delineators	Construction Material (Plastic / Polymer-Based)	All manufacturing processes must occur in U.S.	Multi-material pipe with metal liners → Manufactured Product.
Glass panels, optical glass lenses	Construction Material (Glass)	All manufacturing processes must occur in U.S.	Assemblies that combine glass with other components → Manufactured Product.
Fiber-optic cable, optical fiber	Construction Material (Fiber / Optical)	All manufacturing processes (fiber draw, buffering, jacketing) must occur in U.S.	Any added components (electronic connectors, assemblies, transceivers) → Manufactured Product.
Lumber, timber posts, engineered wood, plywood	Construction Material (Lumber / Wood)	All manufacturing processes must occur in U.S..	Engineered trusses with hardware → Manufactured Product.
Drywall, gypsum board	Construction Material (Drywall)	All manufacturing processes must occur in U.S.	Joint compound is not separately certified.
Paints, coatings, sealers, adhesives, epoxies, and similar applied materials	Construction Materials	All manufacturing processes must occur in U.S.	

Table C-1: NCDOT Permanent Material Classification Reference Chart

Material/Example	Category	Applicable Requirement	Notes/Examples of Application
Electrical wire harnesses, pre-wired junction boxes	Manufactured Product	Final assembly in U.S.; >55% domestic component cost by 10/1/26.	Assembly location and cost documentation required.
Concrete block, concrete brick, clay brick	Manufactured Product	Final assembly in U.S.; >55% domestic component cost by 10/1/26.	Assembly location and cost documentation required.
Aluminum sign panels with reflective sheeting applied prior to delivery	Manufactured Product	Final assembly in U.S.; >55% domestic component cost by 10/1/26.	Assembly location and cost documentation required.
Precast or prestressed concrete beams, girders, cored slabs	Manufactured Product with Iron & Steel Compliance Required for Steel Components	Final assembly in U.S.; >55% domestic component cost by 10/1/26. Steel reinforcement must meet Buy America.	FHWA's "one bucket, two exceptions" rule. Assembly location and cost documentation required.
Precast concrete boxes, manholes, vaults, noise-wall panels	Manufactured Product with Iron & Steel Requirements for Steel Components	Final assembly in U.S.; >55% domestic component cost by 10/1/26. Steel reinforcement must meet Buy America.	FHWA's "one bucket, two exceptions" rule. Assembly location and cost documentation required.
Traffic signal cabinets, controllers, LED luminaires, ITS cameras, sign structures with electrical assemblies	Manufactured Product with Iron & Steel Requirements for Steel Components	Final assembly in U.S.; >55% domestic component cost by 10/1/26. Iron/steel must meet iron/steel requirements.	FHWA's "one bucket, two exceptions" rule. Assembly location and cost documentation required.
Cement, cementitious materials, fly ash, slag, aggregates, sand, gravel, binding agents, additives	Excluded Material (Section 70917(c))	No domestic content requirement.	No certification required unless part of a manufactured product.
Seed, straw, sod, fertilizer, compost, mulch, topsoil, live plants, trees, shrubs	Not Subject to Domestic Content Requirements	No domestic content requirement	No certification required

Appendix D — NCDOT Total Component Cost Guidance

*Application to Iron and Steel Classification and
Manufactured Product Domestic Content*

Purpose and Status of this Appendix

This appendix provides guidance for determining “total component cost” for purposes of applying federal domestic content thresholds under Buy America and Build America, Buy America (BABA).

Specifically, it addresses:

- Whether a product is predominantly iron or steel based on whether iron and steel content exceeds 50 percent of the total component cost; and
- Whether a manufactured product satisfies the requirement that greater than 55 percent of the total component cost is domestically sourced.

This appendix explains how these thresholds are applied in practice for material classification and domestic content compliance. It does not establish independent requirements and does not supersede federal statute or regulation. In all cases, the requirements of 2 CFR Part 184, as implemented by the Federal Highway Administration (FHWA), control.

Regulatory Basis for Component Cost Determinations

Federal domestic material requirements rely on the concept of component cost rather than finished-product price. Under 2 CFR Part 184, each product is evaluated by identifying its components and determining the cost attributable to each component.

For both iron and steel classification and manufactured product domestic content determinations, the denominator used in all percentage calculations is the total cost of all components of the product. This total includes both domestic and foreign components and is determined in accordance with 2 CFR 184.5.

A component is any article, material, or supply that is directly incorporated into a product. Packaging materials, installation labor, final assembly labor, overhead associated with final assembly, and profit are not components and are not included in component-cost calculations.

Component-cost determinations are used at two distinct points:

1. To determine whether a product is predominantly iron or steel for purposes of classification under the Single Classification Rule; and

2. For manufactured products, to evaluate compliance with applicable domestic content thresholds.

Determining Component Cost Under 2 CFR 184.5

Component cost is determined differently depending on whether the component is purchased from an external supplier or manufactured in-house by the product manufacturer.

For a purchased component, the cost of the component consists of:

- The acquisition cost (purchase price);
- Transportation costs to the location where the component is incorporated into the product; and
- Any applicable customs duties.

For a component manufactured by the manufacturer, the cost of the component consists of:

- All direct costs associated with manufacturing the component, including materials and labor;
- Allocable overhead costs reasonably associated with component manufacture; and
- Transportation costs to the location where the component is incorporated into the final product.

Profit is excluded from component cost. Costs associated with manufacturing or assembling the finished product are also excluded and must not be allocated to individual components.

Manufacturers may rely on their normal cost-accounting systems, provided those systems reasonably allocate costs in a manner consistent with these definitions and can be documented if requested.

Applying the 50 Percent Threshold for Iron and Steel Classification

Under 2 CFR 184.3, a product is classified as an **iron or steel product** when the cost of its iron and steel content exceeds 50 percent of the total cost of all components.

This determination is a classification step, not a compliance step. Its purpose is to decide whether the product is governed by iron and steel manufacturing requirements, or by manufactured product requirements.

The process is as follows:

1. Identify all components of the product.
2. Determine the component cost for each component in accordance with 2 CFR 184.5, as described above.
3. Identify any iron or steel components, including mill products, castings, forgings, and other iron or steel elements.
4. Sum the cost of all iron and steel components.
5. Sum the total cost of all components.
6. Divide the iron and steel component cost by the total component cost.

If the resulting percentage exceeds 50 percent, the product is classified as an iron and steel product. Once classified as such, all manufacturing processes for the iron and steel product must occur in the United States, and the manufactured-product 55 percent test does not apply.

Example – Iron and Steel Classification:

A fabricated sign support consists of the following components:

- Structural steel members: \$6,200
- Aluminum brackets: \$1,100
- Fasteners and coatings: \$900

Total component cost = \$8,200

Iron and steel component cost = \$6,200

$\$6,200 \div \$8,200 = 75.6\%$

Because iron and steel content exceeds 50 percent of total component cost, the product is classified as an iron and steel product. All manufacturing processes for the iron and steel must therefore occur in the United States.

Applying the 55 Percent Domestic Content Threshold for Manufactured Products

For manufactured products, compliance is evaluated using the following test.

Beginning October 1, 2026, a manufactured product satisfies domestic content requirements when:

1. Final assembly occurs in the United States; and
2. Greater than 55 percent of the total component cost is attributable to components that are mined, produced, or manufactured in the United States.

The process for evaluating the 55 percent threshold is as follows:

1. Identify all components of the manufactured product.
2. Determine the component cost for each component in accordance with 2 CFR 184.5, as described above.
3. Identify which components are domestic and which are foreign.
4. Sum the cost of domestic components.
5. Sum the total cost of all components.
6. Divide the domestic component cost by the total component cost.

If the resulting percentage is greater than 55 percent, the manufactured product meets the domestic content requirement.

Example – Manufactured Product Domestic Content

An electrical cabinet consists of the following components:

- Domestic steel enclosure: \$3,800
- Domestic wiring and internal hardware: \$1,400
- Foreign control module: \$1,500
- Foreign display interface: \$800

Total component cost = \$7,500

Domestic component cost = \$5,200

$\$5,200 \div \$7,500 = 69.3\%$

Because greater than 55 percent of the total component cost is domestic and final assembly occurs in the United States, the manufactured product meets BABA domestic content requirements.

Relationship Between Classification and Compliance

The 50 percent iron and steel test and the 55 percent manufactured product test serve different purposes and must not be applied simultaneously.

The iron and steel test is used only to classify a product. Once a product is classified as iron and steel, it is no longer evaluated as a manufactured product, regardless of the number of non-steel components it contains.

The 55 percent domestic content test applies only to manufactured products. It does not apply to iron and steel products and does not override iron and steel manufacturing requirements.

Therefore, correct classification under the Single Classification Rule is a prerequisite to applying the correct domestic content standard.

Documentation and Certification Considerations

Manufacturers and suppliers are responsible for ensuring that component cost determinations underlying any domestic material certification is consistent with federal definitions and supported by reasonable documentation. Cost breakdowns are not routinely submitted with certifications but must be retained and made available if requested to support audit or review.

NCDOT does not prescribe a specific cost accounting methodology. Any reasonable, consistently applied method that aligns with 2 CFR 184.5 and can be substantiated is acceptable.

*Appendix E —
Sample Prime
Contractor Domestic
Material Compliance
Affirmation*

[Contract Administrator's Name]
North Carolina Department of Transportation
[Street Address]
[City, State, Zip]

CONTRACT NO.:
WBS:
FEDERAL-AID NO.:
T.I.P NO.:

Subject: Domestic Material Compliance Affirmation

Date:

Dear [Mr./Ms.] [Contract Administrator's Last Name]:

I, [First Name Last Name], on behalf of [Contractor's Legal Name], acknowledge and affirm our responsibility to comply with all applicable federal and state domestic material requirements governing this contract, including the Build America, Buy America special provision found in the contract.

We acknowledge that domestic material requirements apply, as applicable, to iron and steel products, construction materials, and manufactured products that are permanently incorporated into the work, and that compliance is based on proper material classification, certification, and documentation in accordance with the contract.

We affirm that no material subject to domestic content requirements will be permanently incorporated into the work without a valid manufacturer or supplier certification consistent with the applicable material category. Such certifications will accompany or be clearly traceable to the corresponding bill of lading, invoice, or packing list and will be provided prior to payment.

We understand that this affirmation is contract-level only, does not replace individual product-level certifications, and that the Department may withhold or recover payment for materials incorporated without compliant documentation.

We have reviewed and will comply with applicable requirements under 23 CFR 635.410, 2 CFR Part 184, and NCGS Section 136-28.7, as implemented through the contract documents.

Sincerely,

(Authorized Representative Signature)
[Printed Name and Title]
[Contractor's Legal Name]
[Business Address]
[Phone / Email]

County, North Carolina

Signed and sworn to before me this day by _____.

Name of principal

Date: _____

(Official Seal)

Official Signature of Notary

_____, Notary Public

Notary's printed or typed name

My commission expires: _____

*Appendix F —
NCDOT Manufacturer
and Supplier Domestic
Material Self-
Certification*

NCDOT Manufacturer and Supplier Domestic Material Self-Certification

This certification is for a manufacturer or supplier to confirm that the articles, materials, or supplies listed below comply with the applicable domestic content procurement preferences in the Buy America Act (23 CFR 635.410) and the Build America, Buy America Act (2 CFR Part 184), as implemented in the Build America, Buy America (BABA) special provision found in the contract. This certification must be traceable to the specific shipment or delivery and must clearly identify the items covered and the associated bill of lading, invoice, or packing list.

PART 1 – COMPANY / CONTACT INFORMATION

Field	Entry
Company / Producer / Manufacturer Name	
Supplier Representative Name	
Contact Email Address	
Contact Phone Number	
Certification Date	

PART 2 – MATERIAL AND PROJECT INFORMATION

Field	Entry
Material Classification (per Article 106-1 of the <i>Standard Specifications</i>)	
Product / Model / Part / Material	

All covered items are clearly identified on the attached or associated Bill of Lading / Invoice / Packing List referenced below.

Associated Bill of Lading / Invoice / Packing List No.	Entry
Producer / Manufacturer Address	
City	
State	
NCDOT Contract Number (or similar)	
TIP Number (if applicable)	

List the product(s), model(s), or part number(s) covered by this certification, or check the box above if all covered items are clearly identified on the attached or associated Bill of Lading, Invoice, or Packing List.

Classify the article, material, or supply in accordance with Subarticle 106-1 (C) of the Standard Specifications. Additional guidance on category distinctions is available from the Department.

PART 3 – DECLARATION OF SUBMITTAL

Do the articles, materials, or supplies identified above comply with the applicable domestic material requirements under the Buy America Act (23 CFR 635.410) and the Build America, Buy America Act (2 CFR Part 184), as implemented in Subarticle 106-1 (C) of the *Standard Specifications* (Y/N)? _____

PART 4 – CERTIFICATION

I certify that the description above is a true and accurate description of the article, material, or supply provided, and that the undersigned is authorized to legally bind the company or organization represented herein.

I certify that the iron or steel product, construction material, or manufactured product , as classified under Article 106-1 of the *Standard Specifications*, complies with the applicable Buy America or Build America, Buy America requirements.

Signature

Date

Printed Name

Title

Company/Organization Address

NOTES

1. This certification must be traceable to each shipment or delivery containing materials subject to domestic material requirements and must reference the associated bill of lading, invoice, or packing list.
2. Manufacturers and suppliers may reuse a previously completed certification for the same material, provided the certification date and shipment-specific identifiers are updated.
3. Manufacturers and suppliers may use their own certification format provided it contains all information and affirmations listed herein.

*Appendix G —
Article 106-1 (Materials
and Manufacturing) of
the Standard
Specifications for Roads
and Structures Special
Provision*

Overview

This appendix provides the NCDOT special provision for Article 106-1 (Materials and Manufacturing) reflecting domestic material requirements for contracts with funds obligated on or after October 1, 2025, and prior to October 1, 2026.

The provision below is provided for reference. The version included in the contract governs.

Provision Version Reference

The applicable version of the Build America, Buy America (BABA) special provision is determined by the date of federal funds obligation. The appropriate version is included in the contract by NCDOT and governs for that project. Current versions are available on the Connect NCDOT site under Resources > Specifications > 2024 Specifications and Special Provisions.

- Prior to October 1, 2025: SP01 G005A.
- October 1, 2025, through September 30, 2026: SP01 G005B.
- On or after October 1, 2026: SP01 G005C.
- This version amends the provision below to include the 55 Percent Domestic Content Threshold for Manufactured Products.

BUILD AMERICA, BUY AMERICA (BABA):

(11-15-22)(Rev. 4-21-26)

106

SP1 G05 B

Revise the *Standard Specifications* as follows:

Page 1-47 and 1-48, Article 106-1 GENERAL REQUIREMENTS, lines 30-47 and 1-49, delete and replace Article 106-1 with the following: **106-1 MATERIALS AND MANUFACTURING**

(A) General Requirements

The Contractor shall furnish materials that conform to all contract requirements, are suitable for their intended use, and are free from defects. All materials used in the work shall meet the requirements of the contract and shall be subject to inspection, test, or rejection by the Engineer. All materials permanently incorporated into the completed work shall be new, unless otherwise specified in the contract or as approved by the Engineer.

The Contractor is responsible for selecting, procuring, and delivering materials of the types and quantities necessary to perform the work and meet contract requirements. Delays in material delivery or quality control do not relieve the Contractor of obligations for schedule or quality.

All materials incorporated into the work shall be approved before use. Approval is based on testing, certification, or both, as required by the contract. Department review or acceptance does not relieve the Contractor of responsibility for material compliance. The Department may inspect, sample, and test materials at any time before, during, or after installation.

Materials shall be handled, stored, and protected to prevent damage, contamination, or deterioration. Materials determined to be defective, damaged, contaminated, or otherwise not in compliance shall be rejected and promptly removed from the project.

To facilitate inspection and testing, the Contractor shall furnish a complete statement of origin for all materials, including certifications or samples when requested. This information shall be submitted to the Materials and Tests Unit when required by the contract or as directed by the Engineer, in advance of fabrication, shipment, or use to allow for appropriate inspection.

The Contractor shall furnish Safety Data Sheets (SDS) for all paints and hazardous chemicals proposed for use on the project, in accordance with the North Carolina Hazard Communication Standard, 29 CFR 1910.1200 and NCGS § 95-174.

The Contractor shall provide access, equipment, means and assistance for the verification and calibration of any devices used in testing, measurement, or documentation of materials.

If the Contractor proposes to use materials from local deposits not identified in the contract, the Contractor shall be responsible for preliminary sampling, source approval, and production of acceptable material. Preliminary samples shall be furnished at no cost to the Department. If requested in writing, the Department may perform sampling, with costs to be charged to the Contractor as determined by the Engineer.

Sampling or testing by the Department does not constitute pre-approval or acceptance of material. The Contractor remains responsible for ensuring quality and uniformity of all materials produced or delivered, including those from local deposits. The Contractor shall indemnify and hold harmless the Department from any claims, costs, or damages related to the development or use of such sources, including, but not limited to, failure to meet quantity or quality requirements.

Materials covered by Subarticles 106-1(B) and 106-1(C) shall comply with applicable domestic content requirements, including those for iron and steel, construction materials, and manufactured products.

(B) Domestic Material Requirements

Domestic material requirements apply to iron and steel products permanently incorporated into any project in accordance with 23 USC § 313, 23 CFR 635.410, and NCGS § 136-28.7. Construction materials and manufactured products permanently incorporated into the work are subject to domestic content requirements only on federal-aid projects, in accordance with 23 USC § 313, Build America Buy America Act (IIJA § 70914), 2 CFR 184, and as implemented for the federal-aid highway program through 23 CFR Part 635.410.

All iron or steel products, construction materials, and manufactured products subject to domestic content requirements shall be of domestic origin and meet the applicable requirements of the contract based on the project's funding source.

Before any materials are delivered to the project, the Contractor shall submit a notarized letter acknowledging their understanding of the domestic material requirements for the specific contract. This acknowledgment is a contract-level affirmation that the Contractor is responsible for ensuring that no iron or steel product, construction material, or manufactured product subject to domestic content requirements is permanently incorporated into the work without the required certification. This acknowledgment does not substitute for product-level certifications from the manufacturer or supplier. The Department reserves the right to deny or recover payment for any material incorporated into the work without valid documentation.

For iron and steel, all manufacturing processes must occur in the United States.

For construction materials, all manufacturing processes must occur in the United States.

For manufactured products, final assembly must occur in the United States.

Before any iron or steel product, construction material, or manufactured product subject to domestic content requirements is eligible for payment, the Contractor shall submit a certification from the manufacturer or supplier confirming compliance with the applicable regulations. A separate certification is required for each shipment or delivery and must clearly identify the items covered, linked to the associated bill of lading, invoice, or packing list.

The Contractor shall ensure that all required certifications from the manufacturer or supplier are obtained and submitted to the Engineer prior to payment for any iron or steel product, construction material, or manufactured product subject to domestic content requirements. The Engineer will retain documentation in accordance with Department procedures. Compliance with domestic material requirements is the responsibility of the Contractor, based on certifications and documentation provided by the manufacturer or supplier.

(C) Material Category Requirements

(1) Iron and Steel Products

Items are considered iron or steel products if they consist wholly or predominantly of iron or steel. Predominantly means the cost of iron or steel components exceeds 50% of the total cost of all product components.

All steel and iron products that are permanently incorporated into the work shall be produced in the United States. This includes any such item that is melted, cast, rolled, formed, shaped, drawn, extruded, forged, fabricated, finished or otherwise processed in the manufacture of the product. Coatings applied to iron and steel products shall also be applied in the United States.

A minimal amount of foreign iron or steel products may be permitted provided the total value of such foreign material, as delivered to the project, does not exceed 0.1% of the total contract cost or \$2,500, whichever is greater. Documentation establishing the value of the foreign material shall be submitted when requested. This allowance is intended only for incidental quantities that may arise despite good-faith compliance efforts and may not be used to intentionally procure foreign iron or steel.

Domestically produced high-strength fasteners are required, and foreign-produced high-strength fasteners are not permitted under any circumstance.

Raw materials such as pig iron, processed pelletized iron ore, and reduced iron ore may be sourced internationally; however, all manufacturing processes to produce the final

product, including coatings, must occur within the United States.

(2) Construction Materials

Construction materials shall consist of a single, listed material type permanently incorporated into the work as defined in 2 CFR 184.3. The following are classified as construction materials:

- (a) Non-ferrous metals (such as aluminum, copper, and zinc);
- (b) Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- (c) Glass (including optical glass);
- (d) Fiber optic cable (including drop cable);
- (e) Optical fiber;
- (f) Lumber;
- (g) Engineered wood;
- (h) Drywall

For construction materials, all manufacturing processes must occur in the United States. If a construction material is combined with other materials, components, or features to form a product with new properties or functions, it shall be classified as a manufactured product.

Minor additions such as binding agents, dyes, or adhesives that do not materially alter the item's properties do not affect classification.

(3) Manufactured Products

Manufactured products are articles, materials, or supplies that are made by combining one or more materials to create a product with new or different properties, functions, or uses. This includes items that incorporate multiple components, materials, or assemblies and cannot be classified as a single listed construction material.

Final assembly of all manufactured products must occur in the United States. Certification must address the product as a whole, including all incorporated components.

Items that meet the definition of construction materials or iron and steel products shall not be reclassified as manufactured products.

(4) Materials Not Subject to Domestic Content Requirements

The following materials are not subject to domestic content requirements and do not require certification, as identified below:

(a) Materials Excluded by Federal Statute or Regulation

The following materials are excluded from domestic content requirements under applicable federal law or regulation:

- (i) Cement and cementitious materials
- (ii) Aggregates such as stone, sand, or gravel
- (iii) Aggregate binding agents or additives

(b) Materials Not Permanently Incorporated into the Work

Materials that are not permanently incorporated into the completed project are not subject to domestic content requirements. Materials are not permanently incorporated when they are used solely to facilitate construction activities and do not perform an ongoing structural, operational, or functional role after construction is complete. Determinations regarding whether a material is permanently incorporated will be made by the Engineer.

(D) Classification and Clarification of Materials

All items subject to domestic content requirements shall be classified as either an iron or steel product, construction material, manufactured product, or a material not subject to domestic content requirements based on their final form as delivered to the project site. Each item may be classified into only one category and shall not be reclassified to avoid more stringent requirements. Classification of a manufactured product does not relieve the Contractor of compliance with iron and steel domestic manufacturing requirements applicable to embedded iron or steel components when required by federal law or regulation. When an item's classification is uncertain or does not clearly fall within the listed categories, the Contractor shall submit the item for review by the Engineer. Approval must be obtained prior to procurement or incorporation into the project.

*Appendix H —
Governing Authorities
and Source Documents*

Governing Authorities and Source Documents

This appendix identifies the federal and state statutes, regulations, and official agency guidance that govern the domestic material requirements addressed in this guidance document and its appendices. These authorities establish the legal framework for Buy America and Build America, Buy America Act (BABA) compliance applicable to North Carolina Department of Transportation (NCDOT) projects.

This appendix is provided as a reference resource. It does not create independent requirements, supersede controlling law or regulation, or modify project-specific contract provisions. In the event of any inconsistency, the applicable federal or state statute, regulation, or any approved waiver (whether project-specific or general) will govern.

Federal Statutes

The following federal statutes establish domestic preference requirements applicable to transportation infrastructure projects:

- **23 USC Section 313** - Buy America requirements for federal-aid highway projects, including iron, steel, manufactured products, and associated waiver authority.
- **Infrastructure Investment and Jobs Act (IIJA), Public Law 117-58** - Includes BABA, Section 70901–70927, expanding domestic preference requirements to construction materials and manufactured products for federally funded infrastructure.
- **Surface Transportation Assistance Act of 1982 (Public Law 97-424)** - Established the modern Buy America statutory framework later codified at 23 USC Section 313.
- **Moving Ahead for Progress in the 21st Century Act (MAP-21), Public Law 112-141** - Clarified project-level applicability of Buy America requirements within the scope of a National Environmental Policy Act (NEPA) decision.
- **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Public Law 109-59** - Recodified Buy America requirements within Title 23 of the United States Code.

Federal Regulations

The following regulations implement and govern domestic material requirements for federal-aid projects:

- **23 CFR Section 635.410** - Federal Highway Administration (FHWA) Buy America regulation governing iron, steel, and manufactured products, including *de minimis* provisions, waiver procedures, and amendments implementing BABA-aligned requirements.
- **2 CFR Part 184** - Office of Management and Budget (OMB) regulation implementing BABA, including material definitions, the Single Classification Rule, domestic content standards, and waiver requirements (including Sections 184.7 and 184.8 governing waiver justification and public notice procedures).
- **2 CFR Section 200.322** - Uniform Guidance provisions governing domestic preferences for federal financial assistance programs.

Federal Executive Actions and OMB Guidance

The following Executive Orders and OMB memoranda guide federal implementation and oversight of domestic preference requirements:

- **Executive Order 14005** - “Ensuring the Future Is Made in All of America by All of America’s Workers.”
- **OMB Memorandum M-21-26** - “Increasing Opportunities for Domestic Sourcing and Reducing the Need for Waivers.”
- **OMB Memorandum M-22-11** - Initial implementation guidance for BABA.
- **OMB Memorandum M-24-02** - Final implementation guidance aligning federal agencies with 2 CFR Part 184.

Federal Highway Administration Rules, Waivers, and Notices

The following FHWA actions directly affect domestic material requirements applicable to highway projects:

- **FHWA Final Rule (January 14, 2025), 90 FR 2957** - Termination of the Manufactured Products General Waiver and establishment of Buy America requirements for manufactured products.
- **FHWA Temporary Waiver for Construction Materials (2022–2023)** - Transition relief during early BABA implementation.

- **DOT General Applicability Waiver for *De Minimis* Costs and Small Grants (August 16, 2023), 88 FR 55817** - Department-wide general applicability waiver applicable to qualifying projects.
- **23 CFR 635.410(b)(4)** - FHWA iron and steel de minimis provision (administrative allowance for incidental foreign iron and steel).
- **FHWA Requests for Information (RFIs)** - Including RFIs addressing manufactured product availability and market readiness used to inform rulemaking.

State Statutes and NCDOT Contract Authorities

The following state laws govern domestic material requirements on NCDOT projects:

- **NCGS Section 136-28.7** - North Carolina statute requiring domestic iron and steel on NCDOT contracts regardless of funding source.

FHWA Interpretive Guidance and Administrative Materials

This guidance document reflects FHWA's official interpretations of Buy America and BABA requirements, as communicated through publicly issued guidance materials, including:

- FHWA questions-and-answers (Q&A) documents;
- FHWA policy memoranda and implementation guidance; and
- FHWA technical assistance communications of general applicability.

These materials are interpretive in nature and are used to clarify regulatory application. They do not create independent legal requirements and are not listed individually in this appendix.

Relationship to Project-Specific Requirements

This appendix identifies the sources used to develop this guidance document. Project-specific domestic material requirements remain governed by:

- Applicable statutes and regulations in effect at the time of advertisement and award;
- Approved waivers or categorical exemptions; and
- Contract-specific special provisions and bid documents.