

**North Carolina Department of Transportation
Materials and Tests Unit
Manufactured Products Group**

**Guardrail and Guiderail Materials
Brand Registration Program**

December 8, 2025

Document Control:

The Guardrail and Guiderail Materials Brand Registration Program is reviewed during use for adequacy and updated as necessary by the NCDOT Materials and Tests Unit Manufactured Products Group.

Scope:

All guardrail and guardrail materials(s) specified in the latest edition of the *NCDOT Standard Specifications for Roads and Structures, Standard Roadway Drawings*, and/or Contract drawings delivered to and incorporated into any NCDOT project must be furnished by a pre-approved supplier. For a company to be approved as a producer/supplier a Brand Registration and Guarantee Certificate meeting the requirements as set forth below must be filed with the State Materials Engineer before shipping any material.

Renewal Period:

This certification will be valid until December 31st at which time a new certification will be due for the next calendar year. A new certificate is due on or before December 31st of each year if no major changes have taken place in the manufacturing process. Whenever changes in the manufacturing process have occurred, a new Brand Certification will be required at that time before the material can be accepted.

Brand Registration and Guarantee for Guardrail and Guiderail Materials (M&T Form M5011), Certificate of Compliance for Guardrail and Guiderail Materials (M&T Form M5021) and/or Guardrail and Guiderail Ownership Update Form (M&T Form M5031) (if applicable) shall be sent to contact information below:

- NCDOT Service Account - Facility Updates facility.updates@ncdot.gov

Revocation of Qualified Status:

- Failure to maintain compliance with the AASHTO Product Evaluation and Audit Solutions for Guardrail/Guiderail (GRL) Materials.
- Critical and major deficiencies as defined by the Engineer.
- Failure to respond to the Engineer's request for information
- Failure to correct continued non-conforming quality. A repetitive non-conforming item requires a corrective action plan to be submitted and approved by the Engineer, implemented and monitored by the facility.
- Failure to comply with Brand Registration and Guarantee requirements may result in the supplier being removed from the Department's Approved Supplier list of Guardrail and Guiderail Materials(s).

Producer/Supplier Brand Registration Requirements:

- Each guardrail and guiderail manufacturer (producer/supplier) must maintain compliance with the AASHTO Product Evaluation and Audit Solutions for Guardrail/Guiderail (GRL) Materials.

- Each guardrail and guiderail manufacturer (producer/supplier) will submit a Brand Registration and Guarantee Certificate, Certificate of Compliance, Facility ownership form, and Guardrail and Guiderail Facility and Producer Information Form on or before December 31st of each year.
- The Brand Registration and Guarantee for Guardrail and Guiderail Materials form is identified as M&T Form M5011, this form is not to be modified or altered. This documentation must be notarized by a notary of the same state as the facility address. The notarized/signed documentation will be submitted to NCDOT Materials and Tests via NCDOT service account information identified above.
- The Guardrail and Guiderail Material Brand Registration Certificate of Compliance is identified as M&T Form M5021, this form is not be modified or altered. Each guardrail and guiderail manufacturer will submit a Certificate of Compliance for any sub-contracted portion of work which lists all manufacturers, suppliers, coating facilities (galvanizing, powder, and/or shop coating) that may be furnishing material and/or performing work for the company. This list shall include plant name, address, type material and/or work being performed for the manufacturer.
- The Guardrail and Guiderail Material Facility Ownership Update Form is identified as M&T Form M5031. Please also update and provide the date and revision number listed on their quality control program.
- Inspection, testing, and shipping documents will be accessible to the Engineer and retained for a minimum of seven years.

Producer/Supplier Certification Package and Shipping Requirements:

- Certifications shall be provided with each shipment and emailed to the Project Engineer.
 - Please see the weblink link for current NCDOT projects: [ProgLocSearch](#).
 - Please also see weblink for NCDOT Search by Name: [Search by Name](#)
- Each shipment of guardrail and guiderail materials shall include a certification package of the following:
 - Purchase order, bill of lading that includes the NCDOT contract number, county, station number, location, facility name, and facility ID number showing the total quantity supplied be each material type.
 - All metal guardrail, guiderail, and associated hardware shall have an NCDOT Type 1 certification, mill test reports (MTR's) that state "Melted and Manufactured in the U.S.A., traceable to the point of origin, and signed by the authorized individual. Galvanized components are to be traceable to a purchase order or other documentation that also include a certification of compliance and the dry film thickness (DFT) readings of the galvanized components.
 - All non-metal materials (i.e. guardrail plastic blocks and/or reflective sheeting) shall have an NCDOT Type 3 certification.
- All guardrail/guiderail materials provided to an NCDOT project shall be accompanied by a notarized Certificate of Compliance that is signed by a company representative who has legal authority to bind the company and contains the following statement:

"We certify that all steel and/or iron products have been furnished as domestic products and have been melted, cast, formed, shaped, drawn, extruded, forged, fabricated, produced, or otherwise processed and manufactured in the United States. This material has been inspected, tested, and conform to the Departments requirements and Brand Certification Program for Guardrail and Guiderail Materials."

Guiderail and Guiderail Manufacturers Quality Control Example:

- Facility Ownership Form
- Company Organizational Chart
- Current Quality Manual to include materials manufactured.
 - Basis of Acceptance
 - Repair procedures
 - Acceptance and/or rejection procedures
- Ordering information shall specify meets the “Buy America Act”.
- Materials
 - The manufacturer will document the type(s), and materials that are being manufactured by the facility. Each producer/supplier shall have a system that maintains traceability to the point of origin of melt.
 - Mechanical properties and test methods
 - Permissible dimensions and weights
 - Marking
 - Coating requirements and test methods
 - Material Samples
- Retest procedures
 - Example procedure(s)

Compliance Auditing:

Verification Samples

- NCDOT may sample these materials at the facility or in the field. When verification samples are requested, they shall be taken in the presence of the Department’s representative and shall be of the size and shape specified by the inspector at the time of sampling.

Monitoring Procedures (QA)

- NCDOT representatives will visually inspect all guardrail and guiderail materials, accept/reject, and sample materials when received on the NCDOT project and/or at the maintenance facility.
- NCDOT representatives may randomly conduct plant inspection as needed/required to ensure compliance with the Department’s brand registration program requirements.