

FRP Reinforcement Sampling and Testing at Precast/Prestress Plants

The VT Inspector:

- Obtain the following documents provided by the FRP reinforcement producer:
 1. Notarized Material Certification
 2. Certificate of Analysis

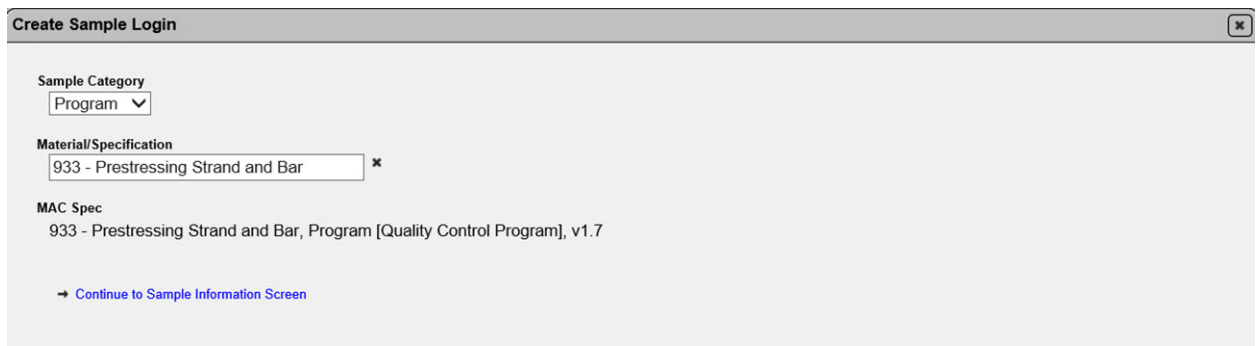
NOTE: The precast/prestress producer should have both documents on file corresponding to the received shipments. The VT inspector should create copies of these documents for uploading into MAC as well as confirm that the LOT #'s match the material to be sampled.

- Sample the material in accordance with 932-3.4.1 or 933-5.2.2.2, as appropriate.
- Tag the samples with identifying information to include Fiber Reinforced Polymers Production Facility, Date Sample Taken, LOT #, etc.
- Provide the tagged samples to the QC Manager and inform them that the plant must work with the Contractor to get the material tested at one of the approved labs listed on the FRP Lab Report in MAC.
- Follow up with the QC Manager to receive a copy of the Certified Test Report from the approved testing lab.
- Create MAC entries under Sample Category: Program using the appropriate MAC Spec
 1. 932FRP – Fiber Reinforced Polymer (FRP) Reinforcing Bars
 2. 933 - Prestressing Strand and Bar



The screenshot shows a web form titled "Create Sample Login". It contains the following fields and text:

- Sample Category:** A dropdown menu with "Program" selected.
- Material/Specification:** A text input field containing "932FRP - Fiber Reinforced Polymer (FRP)" with a small asterisk icon to its right.
- MAC Spec:** A text area containing "932FRP - Fiber Reinforced Polymer (FRP) Reinforcing Bars, Program [Quality Control Program], v1.0".
- Action:** A blue link with a right-pointing arrow: "Continue to Sample Information Screen".



The screenshot shows a web form titled "Create Sample Login". It contains the following fields and text:

- Sample Category:** A dropdown menu with "Program" selected.
- Material/Specification:** A text input field containing "933 - Prestressing Strand and Bar" with a small asterisk icon to its right.
- MAC Spec:** A text area containing "933 - Prestressing Strand and Bar, Program [Quality Control Program], v1.7".
- Action:** A blue link with a right-pointing arrow: "Continue to Sample Information Screen".

- Under 932FRP, Sample Level VT, select the appropriate Category
 1. Fiber Reinforced Polymer (FRP) Reinforcing Bars / Carbon FRP Bars
 2. Fiber Reinforced Polymer (FRP) Reinforcing Bars / Glass FRP Bars

Create Sample Login ✕

MAC Spec
932FRP - Fiber Reinforced Polymer (FRP) Reinforcing Bars, Program [Quality Control Program], v1.0

[← Return to Material Selection Screen](#)

Sample Info

Method of Acceptance Sample Level Category
Sampling And Testing VT ▼ Fiber Reinforced Polymer (FRP) Reinforcing Bars / Carbon FRP Bars ▼

Fiber Reinforced Polymers Production Facility
 *

Date Sample Taken
 *

LOT #
 *

Create Sample Login ✕

MAC Spec
932FRP - Fiber Reinforced Polymer (FRP) Reinforcing Bars, Program [Quality Control Program], v1.0

[← Return to Material Selection Screen](#)

Sample Info

Method of Acceptance Sample Level Category
Sampling And Testing VT ▼ Fiber Reinforced Polymer (FRP) Reinforcing Bars / Glass FRP Bars ▼

Fiber Reinforced Polymers Production Facility
 *

Date Sample Taken
 *

LOT #
 *

- Under 933, Sample Level VT, select the appropriate Category
 1. Strands for Prestressing / Carbon Fiber Reinforced Polymer (CFRP) Strands
 2. Bars for Prestressing / Carbon Fiber Reinforced Polymer (CFRP) Bar

Create Sample Login ✕

MAC Spec
933 - Prestressing Strand and Bar, Program [Quality Control Program], v1.7

[← Return to Material Selection Screen](#)

Sample Info

Method of Acceptance Sample Level Category
 Sampling And Testing VT ▼ Strands for Prestressing / Carbon Fiber Reinforced Polymer (CFRP) Strands ▼

Fiber Reinforced Polymers Production Facility
 *

Date Sample Taken
 *

LOT #
 *

LOTS Represented

Create Sample Login ✕

MAC Spec
933 - Prestressing Strand and Bar, Program [Quality Control Program], v1.7

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Sample Info

Method of Acceptance Sample Level Category
 Sampling And Testing VT ▼ Bars for Prestressing / Carbon Fiber Reinforced Polymer (CFRP) Bar ▼

Fiber Reinforced Polymers Production Facility
 *

Date Sample Taken
 *

LOT #
 *

LOTS Represented

- Enter the LOT # into MAC that corresponds to the LOT # of the bars sampled for testing as well as the LOT # identified by the FRP Production Facility on the Notarized Material Certification and the Certificate of Analysis.

The Precast/Prestressed Producer:

- Works with the Contractor to get the material tested at one of the approved labs listed at mac.fdot.gov > Reports > FRP Lab Report.
- Retains the following documents in the FDOT QC files:
 1. Notarized Material Certification
 2. Certificate of Analysis
 3. Certified Test Report

State Materials Office:

- Reviews the Notarized Material Certification, Certificate of Analysis, and the Certified Test Report for traceability and adherence to the appropriate specification.
- Finalizes the sample in MAC.