
Standard Specification for Fiber-Reinforced Polymer Composite Materials for Highway and Bridge Structures

AASHTO Designation: MP 22-13 (2020)¹

**Technical Subcommittee: 5b, Bridge and Pavement
Preservation**

Release: Group 1 (April)



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1. SCOPE

- 1.1. This specification covers the requirements for fiber-reinforced polymeric composite material systems intended for use in bridge and highway structures.

2. REFERENCED DOCUMENTS

2.1. *AASHTO Standards:*

- [T 161](#), Resistance of Concrete to Rapid Freezing and Thawing
- *AASHTO LRFD Bridge Design Specifications*

2.2. *ASTM Standards:*

- [D883](#), Standard Terminology Relating to Plastics
- [D907](#), Standard Terminology of Adhesives
- [D3039/D3039M](#), Standard Test Method for Tensile Properties of Polymer Matrix Composite Materials
- [D3878](#), Standard Terminology for Composite Materials
- [D5229/D5229M](#), Standard Test Method for Moisture Absorption Properties and Equilibrium Conditioning of Polymer Matrix Composite Materials
- [D7137/D7137M](#), Standard Test Method for Compressive Residual Strength Properties of Damaged Polymer Matrix Composite Plates
- [D7290](#), Standard Practice for Evaluating Material Property Characteristic Values for Polymeric Composites for Civil Engineering Structural Applications
- [E1640](#), Standard Test Method for Assignment of the Glass Transition Temperature by Dynamic Mechanical Analysis
- [G154](#), Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials