



# **PAVEMENT MARKING**

## **Certification Study Guide**

---

*This page intentionally left blank*

---

---

## ACKNOWLEDGEMENTS

The development of this training program is the product of combined efforts and vast resources of many individuals, groups and organizations.

Special appreciation goes to the following individuals for the production of this manual and all training materials:

Debra Casper	Mike McDonald
Carol Fisher	Sam Miller, Jr.
Wayne Fleming	Patricia Murray
John Geisel	James Pappas
Tom Hicks	Wendell Richards
Woody Hood	Gil Rushton
Warren Kelly	Ben Schiappa
Bruce Kenney	Ralph Smith, Jr.
Ramzi Khuri	James Swisher
Dave Kuniaga	Ted Whitmore
Fred Lees	Richard Wray
Fred Lovett	Sharon Zanetti

Our gratitude is extended to the companies listed below for their permission to use their printed materials, slides, videos, and technical information.

3M Company  
Cataphote, Inc.  
Epoplex  
Flint Trading, Inc.  
Potters Industries  
Sherwin Williams  
Stimsonite Trelleborg  
Industry

## TABLE OF CONTENTS

### INTRODUCTION

CHAPTER 1 Standard Practices.....	1-1 - 1-18
CHAPTER 2 Reflective Glass Beads .....	2-1 - 2-18
CHAPTER 3 Traffic Paint .....	3-1 - 3-10
CHAPTER 4 Liquid Thermoplastic.....	4-1 - 4-14
CHAPTER 5 Preformed Thermoplastic.....	5-1 - 5-10
CHAPTER 6 Epoxy Resin.....	6-1 - 6-6
CHAPTER 7 Polyurea Resin.....	7-1 - 7-8
CHAPTER 8 Preformed Tape.....	8-1 - 8-6
CHAPTER 9 Pavement Markers .....	9-1 - 9-6
CHAPTER 10 Installation, Acceptance and Inventory of Materials.....	10-1 - 10-14
CHAPTER 11 Equipment.....	11-1 - 11-6
CHAPTER 12 Eradication.....	12-1 - 12-6
APPENDIX A VDOT Road and Bridge Specifications .....	A-1 - A-12
APPENDIX B VDOT Acceptance of Materials, Inventory Tracking Program and Manual of Instructions with Approved List.....	B-1 - B-22
APPENDIX C Virginia Test Method 94.....	C-1 - C-10
APPENDIX D Answers to Knowledge Check Questions. ....	D-1 - D-14
APPENDIX E Metric Conversion Information .....	E-1 - E-4
APPENDIX F Proficiency Checklists.....	F-1 - F-6

### BIBLIOGRAPHY

## Pavement Marking Course Agenda

### Day 1

7:30 - 8:00	Registration	
8:00 - 9:00	Introduction/VA Reference Materials	Jim Swisher
9:00 - 10:00	Chapter 1 - Standard Practices /Layout, Premarking & Traffic Control	Johnny Davis
10:00 - 10:30	Chapter 2 - Glass Beads (Materials)	Jim Swisher
10:30 - 11:15	Chapter 3 - Traffic Paint (Materials)	Wayne Fleming
11:15 -12:00	Paint/Glass Beads (Application)	Johnny Davis
12:00 - 1:00	Lunch	
1:00 - 1:30	Chapter 11 - Equipment/Paint Truck	Johnny Davis
1:30 - 2:30	Paint Workshop	Wayne Fleming Johnny Davis
2:30 - 3:00	Chapter 4 - Thermoplastic (Materials)	Wayne Fleming
3:00 - 3:30	Chapter 4 - Thermoplastic (Application)	Johnny Davis
3:30 - 4:30	Thermoplastic Workshop	Wayne Fleming Johnny Davis

### Day 2

8:00 - 8:30	Chapter 5 - Preformed Thermoplastic	Wayne Fleming
8:30 - 9:00	Chapter 9 - Pavement Markers	Jim Swisher
9:00 - 9:30	Chapter 8 - Preformed Tape	Jim Swisher
9:30 -10:00	Chapter 12 - Eradication	Jim Swisher
10:00 -10:30	Chapter 7 - Polyurea/Chapter 6 - Epoxy Resin	Wayne Fleming
10:30 - 11:00	Appendix C - VTM-94	Wayne Fleming
11:30 - 12:00	Chapter 10 - Installation / Q C, Acceptance of Materials, Mat'ls Inventory Tracking Program	Jim Swisher
12:00 -1:00	Lunch	
1:00 -4:00	Exam	

**Test:** Open Book – 50 multiple choice

**Proficiency:** Open Book – 25 multiple choice - given with exam

**Grading:** Score 70% or better to pass

**Exam Results:** Can be found on VDOTU. For non-VDOT personnel results can be found on the following website: <https://virtualcampus.vdot.virginia.gov/external> . If you have any questions call (804)328-3158.



APPLICATION FOR VDOT MATERIALS TECHNICIAN CERTIFICATION

This is to affirm that \_\_\_\_\_ (Technician’s Name), hereinafter “Technician”, desires to be certified by VDOT as a **Pavement Marking Technician**. By making this Application, Technician acknowledges and agrees that Certification carries inherent rights and responsibilities. The rights include being exclusively sanctioned, along with others so certified by VDOT, to perform sampling, testing, and reporting of test results for quality acceptance, quality control and assurance programs. The responsibilities include performing and reporting tests with the accuracy and precision expected of the Technician in accordance with the required test procedures.

By signing this Application, Technician agrees to strive to maintain compliance with all rules, regulations, specifications, industry standards, procedures and policies, applicable to any work performed under the Certification. A violation of the above as determined by the VDOT Technician Certification Review Board may result in a suspension or revocation of the rights and responsibilities conferred on the Technician. Revocation or suspension of one Certification may be considered a revocation or suspension of all Certifications held by the Technician. Further, any suspension or revocation of Technician’s Certification in any other jurisdiction may result in the VDOT Technician Certification Review Board taking the same or other action, against Technician’s Certification in Virginia.

By signing below, Technician also affirms that he/she is aware that both State and Federal laws may govern construction projects in Virginia, including Title 18, United States Code, Section 1020, that states, in pertinent part, that anyone making falsifications on Federal-aid projects, “Shall be fined not more than \$10,000 or imprisoned not more than five years, or both.”

I, \_\_\_\_\_ (Print Name), affirm that I have read and fully understand the foregoing “APPLICATION FOR VDOT TECHNICIAN CERTIFICATION,” and I agree to be bound by these terms.

\_\_\_\_\_  
Technician’s Signature

\_\_\_\_\_  
Date