

FOREWORD

PURPOSE

This Materials Manual of Testing Procedures has been prepared for the purpose of standardizing test procedures in use in the laboratories under the jurisdiction of the Nevada Highway Department.

SCOPE

This compilation of test methods describes the test procedures that are in use in the laboratories of the Materials and Testing Division of the Nevada Highway Department. The method of test falls into the following three groups:

1. Those which follow an established national standard without modification.
2. Those which follow a national standard in the main but which have been modified in some degree for use in Nevada Highway Department laboratories.
3. Those which have originated through research and which may not be fully described in national publications.

In preparing these methods, considerable emphasis has been placed on the description of precautions that have been found to be necessary to assure accurate and reproducible test results. The aim in developing original methods has been threefold. First, to measure a property that is of importance to performance in service. Second, to make the test as simple and straightforward as possible. Third, to reduce to a minimum the elapsed time necessary for completing the test. In all test methods, considerable study has been given to the factors affecting reproducibility between operators and between laboratories. Considerable work has been done involving studies of the effect on test results of such things as variations in temperature and humidity; rate of temperature change; tolerances in measuring, weighing, and timing; condition of mechanical equipment; etc. An attempt has been made to describe the procedures in such detail that a competent operator who is unfamiliar with the method can obtain accurate results when the text is followed faithfully.

FORM

The loose-leaf form was chosen because it facilitates revision of individual test methods and additions of new methods without reprinting the whole manual. While there are many advantages to this system there is one weakness and that is in the human factors involved in keeping the manuals up to date. The Nevada Department of Highways will make available and, in most cases, distribute additions and revisions to the manual as they are revised. However, it shall be the responsibility of the individual holders of the manuals to see that their manuals are kept up to date.

ORGANIZATION OF THE MANUAL

The manual is divided into individual test methods. Each test method is given a serial number with prefix Nev. to differentiate between Nevada standards and other standards. A final letter is attached to designate revisions. Thus, a first design-

nation of a method might be Nev. 149A; any subsequent revision would be Nev. 149B and so on. Any suggestions or criticisms toward the improvement of this manual will be very much appreciated.

Note 1. The values stated in U.S. customary units are to be regarded as the standard. The metric equivalents of U.S. customary units given in the body of the standard and in the appendix may be approximate.

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