

Designation: D6718 - 02

Standard Practice for Writing Committee D 13 Standards¹

This standard is issued under the fixed designation D6718; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

INTRODUCTION

The position of Committee D13 is that the current issue of the publication entitled *Form and Style for ASTM Standards*, is controlling in all instances of document preparation within subcommittees. While much of its content allows for some optional choices in document format, there are several sections that are mandatory in respect to being included in all standards. These mandatory sections are: *Title, Designation, Scope, Significance and Use, Procedure, Precision and Bias, and Keywords*, which must be included in all documents, with precision and bias specifically required in test methods that generate data in the form of values, counts, or ratings that can be analyzed to yield statistical parameters for stating precision and bias. ASTM documents include test methods, specifications, and other types, such as practices and guides, classifications, terminology, tables, and charts.

Under the ASTM consenus process, ASTM policies about document formats are not implemented uniformly in all committees, nor even in subcommittees within a committee. If a document lacking a required section goes through the ballot steps without receiving a negative vote as to a mandatory section being missing, publication results routinely. Consequently, some standards appear in the Book of Standards with missing mandatory sections, or with other recommended sections that have been omitted. By implementing this practice within Committee D13, a practice which is based firmly on guidance found in *Form and Style for ASTM Standards*, Committee D13 writers will have a reference for producing documents that fulfill ASTM policies.

There are four parts to this practice. The main body describes sections usually contained in standards, and a brief statement of content for each, following a test method example. Next follows an annex that shows more detail and fuller statements of content for each section, again with emphasis on test methods. Then follows an appendix that provides a check-off list for three standards for the use of document writers in seeing that all mandatory and other recommended sections are included.

https://stan. Finally, there follows an annex that provides a synopsis of SI units and usage. 3 11 bc/astm-d6718-02

1. Scope

- 1.1 This practice gives information to Committee D13 document writers that agrees with guidance of the ASTM publication *Form and Style for ASTM Standards*² (hereinafter *Form and Style*) and fits the particular needs of Committee D13.
- 1.2 With guidance from this practice and from *Form and Style*, Committee D13 document writers will have answers to most questions regarding form and style.
- 1.3 Writers may prepare documents, with pertinent requirements in hand, at the time of writing, to meet all ASTM policies.

2. Referenced Documents

2.1 ASTM Standards: ³

D123 Terminology Relating to Textiles

IEEE/ASTM S10 - Use of the International System of Units

(SI): The modern Metric System⁴

2.2 Other ASTM Documents:

Tex-Pac Adjunct ²

3. Terminology

- 3.1 Definitions:
- 3.1.1 *practice*, *n*—a definitive procedure for performing one or more specific operations or functions that does not produce a test result.
- 3.1.2 *specification*, *n*—a precise statement of a set of requirements to be satisfied by a material, product, system, or

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² Available, ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

³ Annual Book of ASTM Standards, Vol. 07.01.

⁴ Annual Book of ASTM Standards, Vol. 14.04.

service that indicates the procedures for determining whether or not each of the requirements is satisfied.

- 3.1.3 *test method*, *n*—a definitive procedure for the identification, measurement, and evaluation of one or more qualities, characteristics, or properties of a material, product, system, or service that produces a test result.
- 3.1.4 For definitions of other textile terms contained in this practice, refer to Terminology D123.

4. Summary of Practice

- 4.1 This practice gives Committee D13 document writers information needed to produce standards that are within ASTM policies regarding form and style.
- 4.2 The most usual sequence of document sections for Committee D13 standards is shown for test methods, specifications, and practices.
- 4.3 Information regarding test methods is highlighted in this practice, with a brief statement of content for each section heading.

5. Significance and Use

- 5.1 The practice shows sections most frequently included in Committee D13 standards, highlighting those sections designated as mandatory.
- 5.2 Use this practice in conjunction with the most current issue of *Form and Style*.
- 5.3 Sections designated as mandatory in *Form and Style* must be included in Committee D13 standards.
- 5.4 In addition to sections designated as mandatory in *Form and Style*, Committee D13 has designated the terminology section to be mandatory in its standards.
- 5.4.1 Subcommittees are responsible for maintaining standards, including terminology. Defined terms must be kept current in standards from which they derive, and in Terminology D123.

5.5 Statements on precision and bias are necessary for test methods that generate data in the form of values, counts, or ratings that can be analyzed to yield statistical parameters for determining precision and bias.

6. Procedure

- 6.1 Of the types of standards allowed by ASTM policies, test methods, specifications, and practices are most often required within Committee D13. This practice is directed primarily to these three types, but the other types not cited are very similar to practice requirements.
- 6.2 Sections usually contained in Committee D13 standards. Writers should follow the sequence in drafting new documents, or in revising current documents.
- 6.3 When following the sequence for test methods as noted above, include information pertaining to each section as indicated in the example that follows.
- 6.3.1 Example of test method sections and content, numbered as usually contained in a test method.

Designation (Mandatory)

(Use assigned test method number and year.)

Title (Mandatory)

(A title should be concise, but identify the use of a test method.)

1. Scope (Mandatory)

(The scope should contain information relating to the purpose of a test method, including any limitations.)

2. Referenced Documents

(List titles of documents cited in the standard, and give sources for documents. Do not list related documents, if not cited within the standard.)

3. Terminology (D13 Mandatory)

(Significant terms with meanings more specialized than common dictionary meanings should be defined within a standard or reference made to a terminology standard under the subcommittee's jurisdiction.)

4. Summary of Test Method

(Include a brief outline of the test method, giving essential features, without the details necessary to the complete statement of procedure.)

5. Significance and Use (Mandatory)

(Include information that explains the relevance and meaning of the test method. Avoid repetition of the scope. State the suitability of the test method for acceptance testing.)

TABLE 1 Sequence for Drafting New Documents

Test Method	Specification	Practice		
Designation (Mandatory)	Designation (Mandatory)	Designation (Mandatory)		
Title (Mandatory)	Title (Mandatory)	Title (Mandatory)		
Scope (Mandatory)	Scope (Mandatory)	Scope (Mandatory)		
Referenced Documents	Referenced Documents	Referenced Documents		
Terminology (D13 Mandatory)	Terminology (D13 Mandatory)	Terminology (D13 Mandatory)		
Summary of Test Method	Classification	Summary of Practice		
Significance and Use (Mandatory)	Ordering Information	Significance and Use (Mandatory)		
Apparatus	Materials and Manufacture	Reagents		
Reagents and Materials	Physical properties	Procedure (Mandatory)		
Hazards	Performance Requirements	Test Methods		
Sampling, Test Specimens, and Test Units	Sampling	Report		
Calibration and Standardization	Number of Tests and Retests	Keywords (Mandatory)		
Conditioning	Test Methods	(Additional Sections may be contained:)		
Procedure (Mandatory)	Inspection	Annex (Mandatory Information)		
Calculation (or Interpretation of Results)	Product Marking	Appendix (Nonmandatory Information)		
Report	Packaging and Marking			
Precision and Bias (Mandatory)	Rejection and Rehearing			
Keywords (Mandatory)	Quality Assurance			
(Additional Sections may be contained:)	Keywords (Mandatory)			
Annex (Mandatory Information)	(Additional Sections may be contained:)			
Appendix (Nonmandatory Information)	Annex (Mandatory Information)			
References (5 or more)	Appendix (Nonmandatory Information)			
Adjunct	References (5 or more)			
•	Adjunct			



6. Apparatus

(Include a brief description of the essential features of equipment required.)

7. Reagents and Materials

(List reagents and materials needed for the procedure.)

8. Hazards

(Include statements relating to safety hazards, precautions, remedial measures, and technical hazards.)

9. Sampling, Test Specimens, and Test Units

(Give directions for obtaining sample test units.)

10. Calibration and Standardization

(Give detailed instructions for calibration and adjustment of any aparatus, for standardization and use of reference standards, for preparation and use of calibration curves or tables.)

11. Conditioning

(Specify time and atmosphere for conditioning test materials.)

12. Procedure (Mandatory)

(Following the sequence of the procedure, give detailed directions for performing the test.)

13. Calculation (or Interpretation of Results)

(Give directions for calculating the test result, along with the number of significant figures. If the test result is of descriptive, relative, or abstract form, give a basis for interpreting the test result, such as by classification or rating.)

14. Report

(State the detailed information required in reporting the results of the test.)

15. Precision and Bias (Mandatory)

(Determine precision by initiating an interlaboratory study, determining components of variance from the data set, and calculating useful precision parameters. Determine the bias shown by a test method in comparison to an accepted referee method, or to standardized materials; but, if this is not possible, state the test method has no known bias.)

16. Keywords (Mandatory)

(Identify terms or phrases that represent the technical information presented in the standard.)

(Additional Sections that May Be Contained:)

References (5 or more that pertain to the test method)

(Include references providing needed supplementary information. If only a few references are included, use footnotes.)

Annex (Mandatory Information)

(Include additional information considered too lengthy for the main text.) **Appendix** (Nonmandatory Information)

(Include additional information that is not a mandatory part of the test method.)

Adjunct

(Include material that is lengthy but required for use of the standard. Adjunct material must be available at the time of publication of the standard.) (End of example for test method sections and content)

- 6.4 When following the sequence for specifications, practices, or other documents, refer to *Form and Style* for descriptions of information to be included in sections. In many instances, this necessary information is similar to that in a test method, and is not repeated here.
- 6.5 Follow the sequence in writing the document to ensure mandatory and other pertinent sections are included.
- 6.5.1 Use one of the check-off lists contained in Appendix X1 as a final check to see that all necessary sections have been included.
- 6.6 For a more detailed discussion of section contents, refer to Annex A1.

7. Keywords

7.1 ASTM documents; form; format; mandatory sections; style; writing standards

(https://standards.iteh.ai) Documerannexreview

 $(Mandatory\ Information)$

A1. MORE DETAILED DISCUSSION OF PREPARING A D13 STANDARD TEST METHOD

- A1.1 This annex gives further guidance to writers of new and revised D13 standards by giving more details regarding section content and by citing certain examples of standardized language that may be inserted into documents.
- A1.2 Though more extensive, this annex is not all inclusive. The preparer of a draft standard should use it in conjunction with *Form and Style*, applying both as they fit the needs of the intended document.
- A1.3 Sections shown as "Mandatory" must appear in all test methods.
- A1.4 Whenever possible, the author should give directions in the imperative voice.
- A1.5 In the following test method example, italicized text contained in parentheses relates to instructions for the particular section in which they appear.
 - A1.6 The example contained below is directed primarily to

test methods, but much of the information applies to the other types of standards.

A1.6.1 Example of test method sections and content are as follows:

(Beginning of test method example:)

This document is not an ASTM standard; it is under consideration within an ASTM technical committee but has not received all approvals required to become an ASTM standard. It shall not be reproduced or circulated or quoted, in whole or in part, outside of ASTM committee activities except with the approval of the Chairman of the Committee having jurisdiction and the President of the Society. Copyright ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959. All Rights Reserved.

(Caveat above, designation and title below are Mandatory)				
New Standard: D		Draft		
Standard Test Method for				
of	1			
(Modify title from test method to specification	on, practice, etc., a	as needed)		



1. Scope (Mandatory)

- 1.1 This test method covers the measurement of
- 1.2 This test method applies to
- 1.3 (Use For Solely SI Standards) The values stated in SI units are to be regarded as standard. No other units of measurement are included in this

1.3 (Use for combined SI and inch-pound standards, not specifying one system of units) The values stated in either SI units or inch-pound units are to be regarded separately as the standard. Within the text, the inch-pound units are shown in parentheses. The values stated in each system are not exact equivalents; therefore, each system shall be used independently of the other. Combining values from the two systems may result in nonconformance with a specification.

- 1.3 (Use for combined SI and inch-pound standards, specifying one system of units) The values stated in SI units (Use inch-pound units, if applicable) are to be regarded as the standard. The values given in parentheses are provided for information only.
- 1.4 (Mandatory caveat) This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. (If there are other specific warning or precautionary statements in the text, cite the appropriate section(s) at the end of the generic hazards caveat.)

2. Referenced Documents

(List in alphanumeric order the designation and complete title of the documents referenced in the standard, such as ASTM Standards, proposals, and adjuncts.)

2.1 ASTM Standards: (Use colon, if there is no text following the headings.) D123 Terminology Relating to Textiles³

D1776 Practice for Conditioning Textiles for Testing³

2.2 ASTM Adjuncts:

Tex-Pac²

2.x (List other standard source(s) assigning consecutive section numbers.) (Use footnote(s) as shown above and placed on the Section 2 page to indicate source of documents. When later citing ASTM standards in the text, cite only the type, designation letter and number. For example: Test Method D2256.)

- 3. Terminology (Review definitions with terminology subcommittee chairman.) 3.1 Definitions:
 - 3.1.1 (term), part-of-speech (for example n) (insert delimiting phrase when applicable) the (definition)
 - 3.1.1.1 Discussion—(Add when applicable)
 - 3.1.x For definitions of other textile terms used in this method, refer to Terminology D123

4. Summary of Test Method

4.1 The

(Generally state what happens to the specimen and how the information is used to calculate the value of the property.)

5. Significance and Use (MANDATORY)

(State whether or not the test method is recommended for use in acceptance testing. If the test method is recommended for such use, give a basis for the statement. When precision of the test method is known and is reasonable, this provides a basis for a recommendation. If the precision statement indicates test results to be unreasonably variable, the test method should not be recommended for use in acceptance testing. If precision is not known, there is little basis for recommending use of the test method in acceptance testing. If precision of a test method is not known, but industry uses it for acceptance testing, a statement to this effect may be included, but it is incumbent upon the responsible subcommittee to establish such general use. If this condition persists over time, and precision is not determined, the recommendation should not be carried over succeeding reapprovals of the test method.)

(Examples of statements that can be used are:)

5.1 This test method is considered satisfactory for acceptance testing of commercial shipments because current estimates of between-laboratory precision are acceptable, and the method is used extensively in the trade for acceptance testing.

5.1 This test method is not recommended for acceptance testing of commercial shipments in the absence of reliable information on between laboratory precision.

5.1 (Some other statement that fits the test method and its known usage and precision.)

- 5.1.1 If there are differences of practical significance between reported test results for two laboratories (or more), comparative tests should be performed to determine if there is a statistical bias between them, using competent statistical assistance. As a minimum, use test samples for such comparative tests that are as homogeneous as possible, that are drawn from the same lot of material as the samples that resulted in disparate results during initial testing, and that are randomly assigned in equal numbers to each laboratory for testing. The test results from the laboratories involved should be compared using a statistical test for unpaired data, at a probability level chosen prior to the testing series. If a bias is found, either its cause must be found and corrected, or future test results for that material must be adjusted in consideration of the known bias.
- 5.2 (Cite any additional information relative to the use and significance of the standard.)

6. Apparatus

(No need to list ordinary laboratory items, such as, rulers, beakers, marking pens, etc.)

- 6.1 Testing Apparatus consisting of the following:
 - (Use footnote 4 below as it applies to a single source of specialized equipment, or when more than one source is available. DO NOT list any sources, if more than one equipment supplier is available.)
- 6.2 Hazards-Refer to the manufacturer's Material Safety Data Sheets (MSDS) for information on handling, use, storage, and disposal of material and reagents used with this standard.

(In some cases, a like hazard statement may be included in the apparatus section. In any event, when required, it should appear directly after the section to which it applies.)

⁴ Apparatus is commercially available. (Or, if only one known supplier use:) The only source of supply at this time is (name and address of the supplier). If you are aware of alternate suppliers, please provide this information to ASTM International headquarters. Your comments will receive careful consideration of the responsible technical committee, which you may attend.

7. Sampling and Test Specimens

(ASTM specifically advises in the Form and Style for ASTM Standards Manual that test methods and specification are to be separate documents. Statements, such as "agreement between purchaser and supplier", "subject to an existing specification", "revision of the test method requirement of the two parties", "lot sample for acceptance testing" are kinds of statements that cannot be contained in Specifications. Descriptions and examples of lot sampling can be referenced or discussed in an appendix (References: Form and Style for ASTM Standards sections A14.2 and B1.2). An example of a sampling and test specimens section for fabric follows:)

- 7.1 Primary Sampling Unit—Consider material as put-up for shipment to be the primary sampling unit, such as rolls, bolts or pieces of fabric, or cartons of garments or flat goods, as applicable. (See Appendix X1)
- 7.2 Laboratory Sampling Unit—As a laboratory sampling unit take from rolls at least one full-width piece of fabric that is 1 m (1 yd) in length along the selvage (machine direction), after removing a first 1 m (1 yd) length. For fabric components of fabricated systems use the entire system.
- 7.3 Test Specimens—From each laboratory sampling unit, cut 8 warp-wise (lengthwise) and 8 filling-wise (widthwise) test specimens 45 mm (1-7/8 in.) by 230 mm (9 in.). For woven fabrics, the long dimensions are cut parallel to the warp yarns for length-wise abrasion and parallel to the filling yarns for widthwise abrasion. Take lengthwise specimens from different positions across the width of the fabric. Take widthwise specimens from different positions along the length of the fabric. Consider the long direction as the direction of test. Abrade the specimens on the face of the material. Specimens preparation need not be carried out in the standard atmosphere for testing. Label to maintain specimen identity
 - 7.3.1 For fabric widths 125-mm (5-in.) or more, take no specimen closer than 25-mm (1-in.) from the selvage edge, and not within 0.5-m (0.5-yd) from the end of the roll or piece.
 - 7.3.2 For fabric widths less than 125-mm (5-in.), use the entire width for specimens but take no specimen within 0.5-m (0.5-yd) from the end of the roll or piece.
 - 7.3.3 Cut specimens representing a broad distribution diagonally across the width of the laboratory sampling unit. Ensure specimens are free of folds, creases, or wrinkles. Avoid getting oil, water, grease, etc. on the specimens when handling.
 - 7.3.4 If the fabric has a pattern, ensure that the specimens are a representative sampling of the pattern.
 - 7.3.5 When test specimens must be taken from an end-use item, for example from a shirt, select specimens from the front, back, sleeves, in both upper and lower portions, to achieve good representation.