



Standard Performance Specification for Feather and Down Fillings for Textile Products¹

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1. Scope

1.1 This performance specification covers requirements for fillings for industry products such as wearing apparel, sleeping bags, and comforters containing down, feathers, down and feather blends, or combinations of the above with other natural or synthetic materials.

1.2 These requirements apply only to the filling material.

2. Referenced Documents

2.1 *ASTM Standards*:²

D 123 Terminology Relating to Textiles

D 4523 Terminology Relating to Feather-Filled and Down-Filled Products

D 4524 Test Method for Composition of Plumage

2.2 *IDFB Testing Regulations*:

Part 3 Determination of Composition

Part 7 Determination of Oxygen Number

Part 10 Volume Measurement (Fill Power)

Part 11a,b Determination of Turbidity

Part 12 Determination of Feather and Down Specie³

3. Terminology

3.1 *Definitions*—For the definitions of textile terms used in this standard, refer to Terminology D 4523.

4. Specification Requirements

4.1 The properties of feather and down filling materials of textile products shall conform to the specification requirements as set forth by IABFLO (International Association of Bedding and Furniture Law Officials) and the American Down and Feather Section of HFFPA (Home Fashion Products Association). See Table 1.

4.2 The wording of claims on the percentage of down present shall not misrepresent the facts directly or indirectly. For example:

4.2.1 A product should not be designated as “100 % Down,” “All Down,” “Pure Down,” or by other terms of similar import unless it in fact contains only down.

4.2.2 A product should not be represented to contain a certain percentage of feathers or down unless it in fact contains the stated percentage as set forth in this standard.

4.3 A product shall not be designated by the name of a waterfowl species unless a minimum of 90 % of that waterfowl plumage contained therein is of that species.

5. Significance and Use

5.1 Feather and down filling material intended for this end use should meet all requirements listed in Table 1 of this specification.

5.2 The uses and significance of particular properties and test methods are discussed in the appropriate sections of the specified test methods.

6. Sampling

6.1 Tests shall be performed on the feather and down filling materials as they will reach the consumer.

6.2 Use the number of specimens directed in each of the applicable test methods.

6.2.1 If the number of specimens is not specified, use a number of specimens per unit in the laboratory sample, such that the user may expect at the 95 % probability level that the test result is not more than 5 % of the average above or below the true value for the unit in the laboratory sample.

7. Test Methods

7.1 *Plumage Cleanliness*—Determine the oxygen number of the filling material as directed in the IDFB Testing Regulations Part 7.

7.2 *Composition of Plumage*—Determine the composition of the filling material as directed in Test Method D 4524 or IDFB Regulations Part 3. See Note 1.

NOTE 1—The exact percentages of down and feathers must be stated on the label for “down,” “down and feather,” and “feather and down” products.

¹ This performance specification is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.61 on Apparel.

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² For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

³ Available from the IDFB (International Down and Feather Bureau), Roederweg 31, D-8750 Aschaffenburg, Germany.

TABLE 1 Down-Filled and Feather Filled Products Requirements

Characteristic	Requirements				Section
	Down	Down and Feathers	Feathers and Down	Waterfowl Feathers	
Content Claim:	Down	Down and Feathers	Feathers and Down	Waterfowl Feathers	
Plumage Cleanliness, Oxygen #	20, max.	20, max.	20, max.	20, max.	7.2
Composition of Plumage					7.2
Down and Plumules	75 %, min	50 to 74 %, min. labeled down %, min	5 to 49 %, min labeled down %, min	20 %, max	7.2
Waterfowl Feathers	25 %, max	100 – down %, max	100 - down % , max	80 %, min	
Down Fiber	10 %, max	10 %, max	10 %, max	10 %, max	7.2
Waterfowl Feather Fiber	10 %, max	10 %, max	10 %, max	10 %, max	
Landfowl Feather	2 %, max	5 % of feather portion, max	5 % of feather portion, max	5 %, max	7.2
Damaged Feathers	2 %, max	7 % of feather portion, max	7 % of feather portion, max	7 %, max	7.2
Residue	2 %, max	2 %, max	2 %, max	2 %, max	7.2
TOTAL	100 %	100 %	100 %	100 %	
Species Designation:	90 %, min	90%, min	90 %, min	90 %, min	7.3

7.3 Determination of Species—Determine the species content of the specimen as directed in the IDFB Testing Regulations Part 12.

7.4 Determination of Turbidity—Determine the turbidity of the specimen as directed in the IDFB Testing Regulations Part 11a and Part 11b.

7.5 Fill Power—Determine the Fill Power as directed in the IDFB Testing Regulation Part 10.

8. Keywords

8.1 down; feather

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