



**United States
Department of
Agriculture**

**Agricultural
Marketing
Service**

**Cotton
Division**

United States Standards for Length of Staple of Cotton

**American Upland Physical Lengths:
Effective July 12, 1985**

American Pima Physical Lengths:

1-5/16"	Effective August 1, 1961
1-3/8" and 1-7/16"	Effective August 10, 1943
1-1/2"	Effective August 1, 1929

United States Standards for Cotton

CFR 7 - Part 28 - Cotton Classing, Testing, and Standards

Subpart C - Standards

Official Cotton Standards of the United States for Length of Staple

Index

Section		Page
28.301	Measurement: humidity; temperature.	2
28.302	Terms of designation.	2
28.303	Standards for length of staple for American Upland Cotton.	2
28.304	Original representation of American Pima cotton staple length.	3
28.306	Over 13/16 inch staple.	4
28.307	Bale of different staple lengths.	4
28.525	(d) Code numbers for Length of Staple Designations.	4

United States Standards for Cotton

OFFICIAL COTTON STANDARDS OF THE UNITED STATES FOR LENGTH OF STAPLE

AUTHORITY: Sections 28.301 to 28.307 issued under Sec. 10, 42 Stat. 1519; 7 U.S.C. 61 Interpret or apply sec. 6, 42 Stat. 1518 as amended, sec. 4854, 68A Stat. 580; 7 U.S.C. 56 26 U.S.C. 4854.

§28.301 Measurement: humidity; temperature.

The length of staple of any cotton shall be the normal length by measurement, without regard to quality or value, of a typical portion of its fibers under a relative humidity of the atmosphere of 65 percent and a temperature of 70° F.

§28.302 Terms of designation.

The length of staple of any cotton shall be designated by that one of the following terms which expresses its measurement in inches and fractions of an inch in accordance with §28.301: “Below 13/16; 13/16; 7/8; 29/32; 15/16; 31/32; 1; 1-1/32; 1-1/16; 1-3/32; 1-1/8; 1-5/32; 1-3/16; 1-7/32; 1-1/4; 1-9/32; 1-5/16; 1-11/32; 1-3/8; 1-13/32; 1-7/16; 1-15/32; 1-1/2; 1-17/32; 1-9/16; 1-19/32; 1-5/8; 1-21/32; 1-11/16; 1-23/32; 1-3/4; and upward in like manner in gradations of thirty-seconds, disregarding any fraction less than a thirty-second.”

§28.303 Standards for length of staple for American upland cotton.

(a) Effective July 12, 1985, standards for the lengths of staple of American upland cotton shall be measurements as determined by the Suter-Webb Duplex Cotton Fiber Sorter in accordance with the test method prescribed in paragraph (c) of this section. Ranges for each official staple length are shown in the table below. Staple standards exceeding 1-1/4 inches, in gradations of thirty-second inches, will be expressed in increments of .041 inches.

[in inches]

Staple Length	Upper quartile length range
13/16	.827-.847
7/8	.909-.929
29/32	.950-.970
15/16	.990-1.010
31/32	1.031-1.051
1	1.072-1.092
1-1/32	1.113-1.133

United States Standards for Cotton

1-1/16	1.154-1.174
1-3/32	1.195-1.215
1-1/8	1.236-1.256
1-5/32	1.277-1.297
1-3/16	1.318-1.338
1-7/32	1.359-1.379
1-1/4	1.400-1.420

(b) Cotton selected for the preparation of practical forms of staple standards shall, to the extent practicable, measure at the mid-point of the appropriate staple range indicated in paragraph (a) of this section.

(c) Length measurements shall be performed in accordance with the “Standard Test Method for Length and Length Distribution of Cotton Fibers (Array Method), ANSI/ASTM D 1440-77 (1982), which is incorporated by reference pursuant to the provisions of 5 U.S.C. 552(a). This standard test method has been adopted by the American National Standards Institute. It is published in the “Annual Book of ASTM Standards,” Part 33, volume 07.02. Copies of the ASTM book and copies of ASTM standard D 1440-77 as a separate publication may be obtained from ASTM, Customer Service, 100 Barr Harbour Drive, W. Conshohocken, PA 19428-2959, USA. A copy of the ASTM standard test method is also on file at the Office of the Federal Register. A notice of any change in the ASTM standard test method cited herein will be published in the FEDERAL REGISTER.

[49 FR 28391, July 12, 1984]

§28.304 Original representation of American Pima cotton staple lengths.

The following lengths of American Pima staple are represented by a quantity of cotton in the custody of the United States Department of Agriculture suitably contained and marked “Original Representation of Official Cotton Standards of the United States,” followed in each instance by the name of growth, appropriate designation for staple length, and the effective date.

Staple length (inches)	Effective Date
1-5/16	Aug. 1, 1961
1-3/8	Aug. 10, 1943
1-7/16	Aug. 10, 1943
1-1/2	Aug. 1, 1929

[49 FR 28391, July 12, 1984]

United States Standards for Cotton

§28.306 Over 13/16 inch staple.

Cotton which is more than thirteen-sixteenths of an inch in length of staple but is not exactly one of the measurements specified in §28.302, shall be designated by that one of such measurements which comes nearest under its true measurement.

[22 FR 10930, Dec. 28 1957. Redesignated at 49 FR 28391, July 12, 1984]

§28.307 Bale of different staple lengths.

Whenever the lengths of staple of cotton taken from one part of a bale is different from that taken from another part of the same bale, the length of staple of the cotton in such bale shall be that of the part which is shorter.

[22 FR 10930, Dec. 28, 1957. Redesignated at 49 FR 28391, July 12, 1984]

§28.525 Symbols and Code Numbers.

For administrative convenience, the symbols and code numbers prescribed in this section may be used in lieu of designations in inches.

(d) Code numbers for Length of Staple Designations.

Length of Staple - inches	Code No.
Below 13/16	24
13/16	26
7/8	28
29/32	29
15/16	30
31/32	31
1	32
1-1/32	33
1-1/16	34
1-3/32	35
1-1/8	36
1-5/32	37
1-3/16	38
1-7/32	39
1-1/4	40
1-9/32	41
1-5/16	42
1-11/32	43

United States Standards for Cotton

1-3/8	44
1-13/32	45
1-7/16	46
1-15/32	47
1-1/2	48
1-17/32	49
1-9/16	50
1-19/32	51
1-5/8	52
1-21/32	53
1-11/16	54
1-23/32	55
1-3/4	56

[32 FR 8760, June 20, 1967, as amended at 50 FR 25198, June 18, 1985; 51 FR 23039, June 25, 1986; 57 FR 34499, Aug. 5, 1992]