



Designation: D2475 – 22

Standard Specification for Felt¹

This standard is issued under the fixed designation D2475; 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.

This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope

1.1 This specification covers all standard types of felt in the form of rolls and sheets that are suitable for mechanical use. Certain special-purpose felts are also covered.

1.2 This specification is not applicable to felt-like products that utilize weaving, knitting, stitching, or bonding such as papermaker's felt.

1.3 Trade practice in the felt industry deals in pounds, yards, and inches, therefore the values stated in inch-pound units are to be regarded as standard. The values in SI units are provided as information only.

1.3.1 The specification referenced in 2.2 uses only inch-pound units.

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

¹ This specification is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.13 on Wool and Felt. Current edition approved June 1, 2022. Published July 2022. Originally approved in 1965. Last previous edition approved in 2013 as D2475 – 01(2013) which was withdrawn in January 2022 and reinstated in June 2022. DOI: 10.1520/D2475-22.

2. Referenced Documents

2.1 *ASTM Standards:*²

D123 Terminology Relating to Textiles

D461 Test Methods for Felt (Withdrawn 2003)³

D4845 Terminology Relating to Wool

2.2 *Federal Standard:*

C-F-206, Felt Sheet: Cloth Felt, Wool, Pressed⁴

2.3 *Felt Manufacturers Council:*

FS14-68/71 Wool Felt Standard Specifications⁵

2.4 *SAE Standard:*⁶

J314b Felts-Wool and Part Wool

3. Terminology

3.1 *Definitions:*

3.1.1 *felt, n*—a textile structure characterized by interlocking and consolidation of its constituent fibers.

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 The last approved version of this historical standard is referenced on www.astm.org.

⁴ Available from Standardization Documents Order Desk, Bldg. 4 Section D, 700 Robbins Ave., Philadelphia, PA 19111-5094, Attn: NPODS.

⁵ Available from the Northern Textile Association, 230 Congress Street, Boston, MA 02110.

⁶ Available from the Society of Automotive Engineers, 2 Pennsylvania Plaza, New York, NY 10001.

TABLE 1 Wool Sheet Felt: Thickness and Mass (Weight)

ASTM (NTA) Class	Color	Thickness, in.			Thickness, mm			Mass (Weight) lb/yd ²		Mass (Weight) kg/m ²	
		Nominal	Tolerances		Nominal	Tolerances		Nominal	Tolerances	Nominal	Tolerances
			Sheets	Cut Parts		Sheets	Cut Parts				
26S1	White	0.125	± 0.014	± 0.016	3.17	± 0.35	± 0.41	1.50	± 0.10	0.81	± 0.05
26S4	Gray	0.188	0.016	0.018	4.78	0.41	0.46	2.25	0.15	1.22	0.08
		0.250	0.020	0.022	6.35	0.51	0.56	3.00	0.20	1.63	0.11
		0.313	0.022	0.024	7.95	0.56	0.61	3.75	0.25	2.04	0.14
		0.375	0.024	0.026	9.52	0.61	0.66	4.50	0.30	2.44	0.16
		0.500	0.030	0.032	12.70	0.76	0.81	6.00	0.40	3.26	0.22
		0.625	0.035	0.037	15.88	0.89	0.94	7.50	0.45	4.07	0.24
		0.750	0.040	0.042	19.05	1.02	1.07	9.00	0.50	4.89	0.27
		0.875	0.046	0.048	22.23	1.17	1.22	10.50	0.55	5.70	0.30
		1.000	0.051	0.053	25.40	1.30	1.35	12.00	0.60	6.52	0.33
		1.250	0.062	0.065	31.75	1.57	1.65	15.00	0.70	8.15	0.38
		1.500	0.072	0.075	38.10	1.83	1.91	18.00	0.80	9.77	0.43
		1.750	0.083	0.085	44.45	2.11	2.16	21.00	0.90	11.40	0.49