

TAPPI Standards compared to Related Standards of ISO and ASTM (revised May 2015)

NOTE: “Related” does not imply “equivalence.” A “Related Standard” may be a standard for a similar property, but this should not assume identical technical content or matching results.

NOTE: ASTM standards for pulp and paper were generally withdrawn in favor of TAPPI Standards. This list will continue to list the former ASTM Standards as an historical cross reference.

TAPPI Number and Title	ISO	ASTM
Fibrous Materials and Pulp Testing		
T 200 Laboratory Beating of Pulp (Valley Beater Method)	5264	
T 204 Solvent Extractives of Wood and Pulp	624	D 1107, D 1108
T 205 Forming Handsheets for Physical Tests of Pulp	5263, 5269/1	
T 207 Water Solubility of Wood and Pulp		D 1110
T 210 Sampling and Testing Wood Pulp Shipments for Moisture	7213, 801/1, 801/2	
T 211 Ash in Wood, Pulp, Paper, and Paperboard: Combustion at 525°C	1762	D 1102
T 212 One Percent Sodium Hydroxide Solubility of Wood and Pulp	699	D 1109
T 213 Dirt in Pulp	5350/1, 5350/2	
T 218 Forming Handsheets for Reflectance Testing of Pulp (Büchner Funnel Procedure)	5269-1	
T 220 Physical Testing of Pulp Handsheets	5270	
T 221 Drainage Time of Pulp	5267-1, 5267-2	
T 222 Acid Insoluble Lignin in Wood and Pulp		D 1106
T 227 Freeness of Pulp (Canadian Standard Method)	5267/2	
T 230 Viscosity of Pulp (Capillary Viscometer Method)	5351/1	
T 231 Zero-Span Breaking Strength of Pulp (Dry Zero-Span Tensile)	15361	D 5804
T 232 Fiber Length of Pulp by Projection	16065-1, 16065-2	
T 233 Fiber Length of Pulp by Classification	16065-1, 16065-2	
T 235 Alkali Solubility of Pulp at 25°C	692	
T 236 Kappa Number of Pulp	302	
T 237 Carboxyl Content of Pulp		D 1926
T 240 Consistency (Concentration) of Pulp Suspensions	4119	
T 244 Acid-Insoluble Ash in Wood, Pulp, Paper, and Paperboard	776	D 586
T 245 Silicates and Silica in Pulp (Wet Ash Method)		D 2438
T 248 Laboratory Beating of Pulp (PFI Mill Method)	5264/2	
T 249 Carbohydrate Composition of Extractive-Free Wood and Wood Pulp by Gas-Liquid Chromatography		D 1915
T 252 pH and Electrical Conductivity of Hot Water Extracts of Pulp, Paper, and Paperboard	6587, 6588	
T 254 Cupriethylenediamine Disperse Viscosity of Pulp (Falling Ball Method)	5351/1	
T 255 Water Soluble Sulfates in Pulp and Paper	9198	
T 256 Water Soluble Chlorides in Pulp and Paper	9197/1, 9197/2	
T 261 Fines Fraction by Weight of Paper Stock by Wet Screening	10376	
T 262 Preparation of Mechanical Pulps for Testing	5263-2, 5263-3	ISO 5263-3??
T 263 Identification of Wood Fibers from Conifers		
T 264 Preparation of Wood for Chemical Analysis		D 1105
T 266 Determination of Sodium, Calcium, Copper, Iron, and Manganese in Pulp and Paper by Atomic Absorption Spectroscopy	777, 778, 779	
T 271 Fiber Length of Pulp and Paper by Automated Optical Analyzer Using Polarized Light	16065-1	
T 272 Forming Handsheets for Reflectance Testing of Pulp (Sheet Machine Procedure)	3688	
T 274 Laboratory Screening of Pulp (MasterScreen-Type Instrument)		
T 277 Macro Stickies Content in Pulp: the “Pickup” Method		D 6148
T 278 Pulp Screening (Valley-Type Screening Device)		
T 280 Acetone Extractives of Wood and Pulp		D 1107, D 1108

Paper and Paperboard Testing

T 400	Sampling and Accepting a Single Lot of Paper, Paperboard, Fiberboard, or Related Product	186	D 585
T 401	Fiber Analysis of Paper and Paperboard	9184 (5 parts)	D 1030
T 402	Standard Conditioning and Testing Atmospheres for Paper, Board, Pulp Handsheets, and Related Products	187	D 685
T 403	Bursting Strength of Paper	2758	D 774
T 404	Tensile Breaking Strength and Elongation of Paper and Paperboard (Using Pendulum Type Tester)	1924/1	
T 405	Petroleum Wax in Impregnated Papers		D 590
T 406	Reducible Sulfur in Paper and Paperboard		D 984
T 409	Machine Direction of Paper and Paperboard		D 528
T 410	Grammage of Paper and Paperboard (Weight Per Unit Area)	536	D 646
T 411	Thickness (Caliper) of Paper, Paperboard, and Combined Board	534, 3034	D 645
T 412	Moisture in Paper and Paperboard	287	D 644
T 413	Ash in Wood, Pulp, Paper and Paperboard: Combustion at 900°C	2144	D 586
T 414	Internal Tearing Resistance of Paper (Elmendorf Type Method)	1974	D 689
T 419	Starch in Paper		D 591
T 423	Folding Endurance of Paper (Schopper Type Tester)	5626	D 643
T 425	Opacity of Paper (15/d geometry, Illuminant A/2°, 89% Reflectance Backing and Paper Backing)	2471	D 589
T 428	Hot Water Extractable Acidity or Alkalinity of Paper		D 548
T 429	Alpha-Cellulose in Paper		D 588
T 430	Copper Number of Pulp, Paper, and Paperboard		D 919
T 431	Ink Absorbency of Blotting Paper		D 2177
T 432	Water Absorbency of Bibulous Papers		D 824
T 433	Water Resistance of Sized Paper and Paperboard (Dry Indicator Method)		D 779
T 434	Acid-Soluble Iron in Paper	779	
T 435	Hydrogen Ion Concentration (pH) of Paper Extracts (Hot Extraction Method)	6588	D 778
T 437	Dirt in Paper and Paperboard		D 2019
T 438	Zinc and Cadmium in Paper		D 1224
T 441	Water Absorptiveness of Sized (Non-bibulous) Paper, Paperboard, and Corrugated Fiberboard (Cobb Test)	535	D 3285
T 444	Silver Tarnishing by Paper and Paperboard		D 2043
T 448	Water Vapor Transmission Rate of Paper and Paperboard at 23°C and 50% RH	2528	E 96, E 398
T 449	Bacteriological Examination of Paper and Paperboard	8784/1	
T 452	Brightness of Pulp, Paper, and Paperboard (Directional Reflectance at 457 nm)	2469,2470	D 985
T 453	Effect of Dry Heat on Properties of Paper and Board	5630/1	D 776
T 454	Turpentine Test for Voids in Glassine and Greaseproof Papers	5634	
T 455	Identification of Wire Side of Paper		D 5039
T 456	Wet Tensile Breaking Strength of Paper and Paperboard (“Wet Tensile Strength”)		D 829
T 458	Surface Wettability of Paper (Angle of Contact Method)		D 724
T 459	Surface Strength of Paper (Wax Pick Test)		D 2482
T 460	Air Resistance of Paper (Gurley Method)	5636-5	D 726
T 461	Flame Resistance of Treated Paper and Paperboard		D 777
T 462	Castor Oil Penetration Test for Paper		D 780
T 464	Water Vapor Transmission Rate of Paper and Paperboard at High Temperature and Humidity	2528	E 96, E 398
T 465	Static Creasing of Paper for Water Vapor Transmission Tests	2528	
T 476	Abrasion Loss of Paper and Paperboard (Taber-Type Method)		
T 479	Smoothness of Paper (Bekk Method)	5627	
T 480	Specular Gloss of Paper and Paperboard at 75°	8254-1	D 1223
T 487	Fungus Resistance of Paper and Paperboard		D 2020
T 489	Bending Resistance (Stiffness) of Paper and Paperboard (Taber-type Tester in Basic Configuration)	2493	D 5342
T 491	Water Immersion Test of Paperboard	5637	
T 493	Identification and Determination of Melamine Resin in Paper		D 1597

T 494	Tensile Properties of Paper and Paperboard (Using Constant Rate of Elongation Apparatus)	1924/2	D 828
T 500	Book Bulk and Bulking Number of Paper		D 2175
T 507	Grease Resistance of Flexible Packaging Materials	5634	F 119
T 509	Hydrogen Ion Concentration (pH) of Paper Extracts (Cold Extraction Method)	6588	D 778
T 511	Folding Endurance of Paper (MIT Tester)	5626	D 2176
T 512	Creasing of Flexible Packaging Material Paper Specimens for Testing		F 119
T 515	Visual Grading and Color Matching of Paper		D 1729
T 516	Envelope Seal, Seam, and Window Patch Testing		
T 519	Diffuse Opacity of Paper (d/0 paper backing)	2471	
T 523	Dynamic Measurement of Water Vapor Transfer Through Sheet Materials		E 96, F 372
T 525	Diffuse Brightness of Pulp (d/0)	2469, 3688	
T 536	Resistance of Paper to Passage of Air (High Pressure Gurley Method)	5636/3	D 726
T 537	Dirt Count in Paper and Paperboard (Optical Character Recognition – OCR)		
T 538	Smoothness of Paper and Paperboard (Sheffield Method)	8791/3	
T 543	Bending Resistance of Paper (Gurley-Type Tester)	5628	D 6125
T 544	Effect of Moist Heat on Properties of Paper and Board	5630/3	D 4714
T 547	Air Permeance of Paper and Paperboard (Sheffield Method)	5636-4	
T 549	Coefficients of Static and Kinetic Friction of Uncoated Writing and Printing Paper by Use of the Horizontal Plane Method	15359	D 4917
T 550	Determination of Equilibrium Moisture in Pulp, Paper and Paperboard for Chemical Analysis	287	D 644
T 551	Thickness of Paper and Paperboard (Soft Platen Method)	534	D 645
T 553	Alkalinity of Paper as Calcium Carbonate (Alkaline Reserve of Paper)		D 4988
T 555	Roughness of Paper and Paperboard (Print-Surf Method)	8791/4	
T 556	Bending Resistance of Paper and Paperboard (Lorentzen & Wettre Type Tester)	2493	
T 558	Surface Wettability and Absorbency of Sheeted Materials Using an Automated Contact Angle Tester		D 724
T 559	Grease Resistance Test for Paper and Paperboard		D 722
T 560	CIE Whiteness and Tint of Paper and Paperboard (Using d/0, Diffuse Illumination and Normal Viewing)	11475	E 313
T 562	CIE Whiteness and Tint of Paper and Paperboard (Using 45/0 Directional Illumination and Normal Viewing)		E 313
T 563	Equivalent Black Area (EBA) and Count of Visible Dirt in Pulp, Paper and Paperboard by Image Analysis		D 6101
T 564	Transparent Chart for the Estimation of Defect Size	5350/3	
T 566	Bending Resistance (Stiffness) of Paper (Taber-type Tester in 0 to 10 Taber Stiffness Unit Configuration)	2493	D 5650
T 567	Determination of Effective Residual Ink Concentration (ERIC) by Infrared Reflectance Measurement	22754	D 1193
T 570	Resistance to Mechanical Penetration of Sanitary Tissue Paper (Ball Burst Procedure)		D 6548
T 571	Diffuse Brightness of Paper and Paperboard (d/0) (T 571 withdrawn in 2006)	2469, 2470	
T 572	Accelerated Pollutant Aging of Printing and Writing Paper by Pollution Chamber Exposure Apparatus		D 6833
T 573	Accelerated Temperature Aging of Printing and Writing Paper by Dry Oven Exposure Apparatus		D 6819
T 574	Wax in Pulp, Paper and Paperboard		D 590
T 576	Tensile Properties of Towel and Tissue Products (Using Constant Rate of Elongation Apparatus)	12625-4	
T 579	Diffuse brightness of paper, paperboard and pulp (d/0) (ultraviolet level D65)	2470-2	

Nonfibrous Materials Testing

T 600	Analysis of Formaldehyde in Aqueous Solutions of Free Formaldehyde in Resins		D 2194
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T 602	Analysis of Sulfuric Acid		E 223
T 605	Reducing a Gross Sample of Granular or Aggregate Material to Testing Size		C 702 D 4689
T 607	Analysis of Casein		E 200
T 610	Preparation of Indicators and Standard Solutions		
T 611	Analysis of Bleaching Powder, Calcium Hypochlorite Bleach Liquor and Bleach Sludge		
T 613	Analysis of Caustic Soda		E 291
T 617	Analysis of Lime		C 25
T 618	Analysis of Limestone		C 25
T 653	Specular Gloss of Paper and Paperboard at 20°		D 523
T 657	Sampling of Fillers and Pigments		C 322
T 665	Analysis of Talc		D 717
T 684	Gross Heating Value of Black Liquor		D 2015
T 698	Determination of Wetting Tension of Polyethylene and Polypropylene Films and Coatings (Modified Visking Analytical Technique)		D 2578

Container Testing

T 800	Drum Test for Fiberboard Shipping Containers (Revolving Hexagonal Drum)		D 782 (wd?)
T 801	Impact Resistance of Fiberboard Shipping Containers		D 880 (wd?)
T 802	Drop Test for Fiberboard Shipping Containers		D 5276 (wd?)
T 803	Puncture Test of Container Board	3036	
T 804	Compression Test of Fiberboard Shipping Containers	12048	D 642
T 807	Bursting Strength of Paperboard and Linerboard	2759	
T 808	Flat Crush Test of Corrugated Board (Flexible Beam Method)	3035	
T 809	Flat Crush of Corrugated Medium (CMT Test)	7263	
T 810	Bursting Strength of Corrugated and Solid Fiberboard	2759	
T 811	Edgewise Compressive Strength of Corrugated Fiberboard (Short Column Test)	3037	
T 815	Coefficient of Static Friction (Slide Angle) of Packaging and Packaging Materials (Including Shipping Sack Papers, Corrugated and Solid Fiberboard) (Inclined Plane Method)		D 4918
T 818	Ring Crush of Paperboard	12192	D 1164 (wd?)
T 822	Ring Crush of Paperboard (Rigid Support Method)	12192	
T 825	Flat Crush Test of Corrugated Board (Rigid Support Method)	3035	
T 826	Short Span Compressive Strength of Paperboard	9895	
T 838	Edge Crush Test Using Neckdown	3037	
T 839	Edgewise Compressive Strength of Corrugated Fiberboard Using the Clamp Method (Short Column Test)	3037	
T 843	Fluted Edge Crush of Corrugating Medium (Rigid Support Method)	16945	

Structural Materials Testing

None of the Structural Materials Standards has any ISO or ASTM equivalents

Testing Practices

T 1200	Interlaboratory Evaluation of Test Methods to Determine TAPPI Repeatability and Reproducibility		D 1749
T 1205	Dealing with Suspect (Outlying) Test Determinations		E 178
T 1210	Units of Measurement and Conversion Factors		D 4826