

TABULATING CARDSTOCK  
MANUFACTURING SPECIFICATIONS

Test Procedure

Basis weight-24 x 36 inch 500 sheet	99lbs. $\pm$ 5%	TAPPI T410-m
Thickness	.007 $\pm$ .0004	TAPPI T411-m
Bursting strength (Mullen #/ sq.inch)	55 minimum	TAPPI T403-m
Stiffness (Taber V-5 Model 150-1)		
Machine direction	17.0 minimum	
Cross direction	8.0 minimum	
Folding endurance (M.I.T. )		
Machine direction	100 minimum	TAPPI T423-m
Cross direction	100 minimum	
Folding endurance after aging		
Machine direction	25% retention	TAPPI T452-m
Tearing resistance (Elmendorf)		
Machine direction	125 minimum	TAPPI T414-m
Cross direction	125 minimum	
Porosity ( Gurley ) seconds	50 to 200	TAPPI T460-m
Smoothness Sheffield		
Felt side	125 maximum	
Wire side	125 maximum	
Sizing (See test procedures )	Pon and ink test	
Percent ash	3.0 maximum	TAPPI T413-m
Acidity -ph value ) (Hot Extraction)	5.0 minimum	TAPPI T435-m
Coefficient of friction ( Cards )		
Static	.30 to .45	
Kinetic friction should not vary more than 25% from Static friction		
Warp of cards (20% R.H. and 75% R.H.)		
Types of Top-to-bottom (TB)	.12" maximum	
warp : End-to-end (EE)	.25" maximum	
Diagonal (D)	.25" maximum	
Moisture content (% of Original weight)		
Test made on rolls at time of conversion	4.5 to 6.5.	TAPPI T412-m
Expansion ( 20% R.H. to 75% R.H. ) %		
Machine direction	.25% maximum	
Cross direction	.70% maximum	

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Contraction (75% R.H. to 20% R.H.)%  
 Machine direction                   .25% maximum  
 Cross direction                   .70% maximum

Conductive particles - 20 per lbs.  
 paper, maximum

SAMPLING, INSPECTION AND TEST PROCEDURES

Samples - Samples of paper for testing will normally be selected according to the procedure of TAPPI Standard T400-m. Where the detail test procedure specifies a different method, the detail specification shall be followed.

Test Conditions - Unless otherwise specified in the detail specification, samples of paper for test shall be conditioned and tested at the temperature and relative humidity specified by TAPPI Standard T402-m. Those conditions are  $73 \pm 3.5$  F and  $50 \pm 2\%$  relative humidity for two hours.

Test Procedures -

TAPPI Standards of the issue in effect at the time of testing shall be followed as designated under specifications.

Paper Sizing Test - A clean, unhandled sample of the paper shall be written upon in a normal manner on both wire and felt sides, using a good grade of commercial ink in a pen with a firm medium point. Shaeffers Skrip permanent blue-black ink and an Esterbrook point, number 9668 are recommended as suitable. The written material shall be dry to touch within 10 seconds after writing. The lines or characters written shall be clear-cut and legible, without excessive feathering or spreading.

Rapport du Laboratoire d'essais du papier

Papeterie :		Spécifications					
Origine des échantillons :							
Masse au m <sup>2</sup> en grammes		161 ± 5 %					
Épaisseur en millimètres		0,178 ± 0,01					
Résistance à l'éclatement (Mullen)		3,870 kg/cm <sup>2</sup> Min.					
Rigidité	Sens machine	Min. 17,0					
	Sens travers	Min. 8,0					
Coefficient de frottement (Écart par rapport au Coeff. statique)	Statique	0,30 à 0,45					
	Cinétique	Max. 25 %					
Teneur en eau (% du poids original)		4,5 à 6,5					
Courbure des cartes 20% HR ( ) 75% HR ( )	Axe de la courbure ( SM ) ( ST ) ( D )	Max 3 mm					
		" 6,3mm					
		" 6,3mm					
Collage (plume et encre)	Côté feutre	Étalement minimum					
	Côté toile						
Résistance au pliage	Sens machine	Min. 100					
	Sens travers	Min. 100					
Résistance au pliage après vieillissement	Sens machine (% rétention)	Min. 25 %					
Résistance à la déchirure	Sens machine	Min. 125					
	Sens travers	Min. 125					
Porosité à l'air (Gurley) en secondes		50 à 200					
Satinage (Sheffield)	Côté feutre	Max. 125					
	Côté toile	Max. 125					
Pourcentage de cendres		Max. 3,0					
Acidité (pH) Extraction à chaud		Min. 5,0					
Expansion (de 20 à 75 % HR)	Sens machine	Max. 0,25%					
	Sens travers	Max. 0,70%					
Contraction (de 75 à 20 % HR)	Sens machine	Max. 0,25%					
	Sens travers	Max. 0,70%					
Résistance à l'abrasion (Taber) Perte par 100 tours	Côté feutre	Max. 50mg					
	Côté toile	Max. 50mg					
Résistance électrique (Megohms)		40 à 200					
Part. conductr. par 100 kg de papier		Max. 44					