

Containerboard Interlaboratory Testing Program

Participant Summary Report #681 - June 2026

[Introduction to the Containerboard Program](#)

[Explanation of Tables and Definitions of Terms](#)

Analysis	Sample	Analysis Name
<u>201</u>	<u>BX20</u>	<u>Top to Bottom Box Compression Strength, Corrugated Boxes</u>
<u>202</u>	<u>EC17</u>	<u>Edgewise Compressive Strength, by T811, Corrugated Board</u>
<u>203</u>	<u>EC17</u>	<u>Edgewise Compressive Strength by T839, Corrugated Board</u>
<u>205</u>	<u>42N1</u>	<u>Bursting Strength (Mullen), 42 lb Linerboard</u>
<u>207</u>	<u>31K1</u>	<u>Bursting Strength (Mullen), 31 lb Linerboard</u>
<u>215</u>	<u>42N1</u>	<u>Ring Crush, 42 lb Linerboard</u>
<u>217</u>	<u>31K1</u>	<u>Ring Crush, 31 lb Linerboard</u>
<u>223</u>	<u>42N1</u>	<u>STFI, 42 lb Linerboard</u>
<u>225</u>	<u>31K1</u>	<u>STFI, 31 lb Linerboard</u>
<u>228</u>	<u>42N</u>	<u>Roughness - Stylus Method, 42 lb Linerboard</u>
<u>229</u>	<u>42N1</u>	<u>Roughness - Sheffield Method, 42 lb Linerboard</u>
<u>231</u>	<u>42N1</u>	<u>Internal Bond, 42 lb Linerboard</u>
<u>234</u>	<u>42N</u>	<u>COF Inclined Plane (Slide Angle), 42 lb Linerboard</u>
<u>237</u>	<u>42N1</u>	<u>Air Resistance, 42 lb Linerboard</u>
<u>240</u>	<u>CM61</u>	<u>Flat Crush Strength (CMT), 26 lb Corrugating Medium</u>
<u>250</u>	<u>CM61</u>	<u>Fluted Edge Crush Strength (CFC), 26 lb Corrugating Medium</u>
<u>255</u>	<u>CM61</u>	<u>Ring Crush (RCT), 26 lb Corrugating Medium</u>
<u>261</u>	<u>CM61</u>	<u>STFI, 26 lb Corrugating Medium</u>

Collaborative Testing Services, Inc.
CONTAINERBOARD INTERLABORATORY TESTING PROGRAM

INTRODUCTION

The Interlaboratory Testing Program for Containerboard is operated and maintained by Collaborative Testing Services, Inc. (CTS), with technical guidance provided by the Containerboard Group of the American Forest & Paper Association. The tests are conducted on a monthly basis.

For these tests samples of linerboard and corrugating medium, that each have been separately randomized from narrow rolls, are distributed for testing weekly. One weight of medium (26 lb.) is used for Concora Flat Crush Strength, Corrugated Fluted Crush Strength, Ring Crush Strength, and STFI Compression. Two weights of linerboard are tested each month for Mullen Burst, Ring Crush, and STFI Compression: 42 lb. - every month; 31 lb. and 52 lb. - alternate months. The participants return their test results for analysis and receive a monthly report.

Please refer to the section, "EXPLANATION OF TABLES", for definitions of terms and guidelines to interpreting the results.

USE OF AVERAGE MEAN AS A COLLABORATIVE REFERENCE VALUE

The samples of linerboard and corrugating medium, which have been randomized and placed in sealed packages for distribution in this program, may be used as collaborative reference materials. The values most representative of each material are the Cumulative Grand Means in the latest reports, given at the bottom right of each table. Comparisons can only be made within one lot of material; therefore check your measurements against the Cumulative Grand Means with the same lot code as on the packages being tested.

Material	Lot Code	Dates in Use
26# Corrugating Medium	CM61	December 2025 - Current
	CM13	September 2023 - November 2025
31# Linerboard	31K1	August 2024 - Current
	35E3	June 2022 - June 2024
42# Linerboard	42N1	December 2025 - Current
	42L4	August 2025 - November 2025
52# Linerboard	52M1	July 2025 - Current
	52J2	September 2024 - May 2025

ABOUT CTS

Founded in 1971, Collaborative Testing Services, Inc. (CTS) is a privately-owned company that specializes in interlaboratory tests for a wide variety of industries including rubber, plastics, fasteners and metals, containerboard, paper, color, agriculture, hemp, and wine, as well as proficiency tests for forensic laboratories. All of the tests are designed to assist organizations in achieving and maintaining quality control objectives. Labs from the U.S., as well as more than 100 countries, currently participate in the CTS programs.

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EXPLANATION OF TABLES

Each analysis is divided into three time spans. On the left side of the table are the individual laboratory results for each week of the month; in the center are each lab's statistical data for the month; and on the right are each lab's cumulative data for up to 16 weeks. At the bottom of the table are the consensus statistics for all the participants for each of the three time spans.

Definitions of Terms Used

Weekly Results

Laboratory Data

- WebCode - A six character laboratory identifier used to maintain information on a confidential basis. The WebCode is unique for each cycle and will change for each report. Your WebCode can be found in your Individual Report (Current Month Performance Report) and your datasheet.
- Weekly Means - The average of the test results obtained by the participant for each week that data were reported.

Consensus Data

- Wk Mean - For each week, the average of the Means for all the participants, excluding those laboratories flagged with an 'X'.
- Avg SD - For each week, the average of the within-laboratory standard deviations (SD's) for all the participants, excluding those laboratories flagged with an 'X'. The Avg SD is an indication of the variation of measurements within an average laboratory.
- SD btwn Labs - For each week, the standard deviation of the laboratory Means about the Wk Mean, excluding those laboratories flagged with an 'X'. The SD LABS is an indication of the precision of measurement between the laboratories.
- Labs Incl - The number of laboratory Means included in the Wk Mean for that week.
- Labs Excl - The number of laboratory Means reported but excluded from the Wk Mean for that week because of outlying results ('X' following Mean).
- Labs not rcvd - The number of laboratories failing to report for that week.

Monthly Results

Laboratory Data

- Mean - For each laboratory, the average of all the weekly Means reported for this month.
- CPV - **Comparative Performance Value**, an indication of how well a laboratory's Mean agrees with the other participants. The CPV is a ratio indicating the number of standard deviations from the consensus mean (Monthly Mean). The closer a laboratory's CPV is to zero, the more consistent its results are with the other participants' data.
- SD - For each laboratory, the average of the weekly within-lab standard deviations (SD's) for all reported Weekly Means this month.
- SD Wk - The standard deviation among the laboratory's weekly Means, including those Means flagged with an 'X'. The SD Wks is an indication of that laboratory's ability to obtain constant results from week to week.

Consensus Data

- Month Mean - The average of the Means for all the participants, excluding those laboratories flagged with an 'X,' reporting data for this month.
- Avg SD - For the current month, the average of the within-laboratory standard deviations (SD's) for all the participants, excluding those laboratories flagged with an 'X'.
- SD btwn Labs - For the current month, the standard deviation of the laboratory Means about the Month Mean, excluding those laboratories flagged with an 'X'.
- SD btwn Group - For the current month, the standard deviation of the laboratory Means within the group about the Month Mean, excluding those laboratories flagged with an 'X'.
- SD btwn Wks - For the current month, the average of the laboratory between week standard deviations (SD Wks) for all the participants, excluding those laboratories flagged with an 'X'.

Cumulative Results

Laboratory Data

Mean	-	For each lab, the average of all the monthly Means reported for the weeks shown.
CPV	-	Comparative Performance Value , an indication of how well a laboratory's cumulative mean agrees with the other participants. The CPV is a ratio indicating the number of standard deviations from the consensus mean (Monthly Mean).
SDr	-	For each laboratory, the average of the weekly within-lab standard deviations (SD's) for the weeks shown.
SD Wk	-	The standard deviation among the laboratory's weekly Means for the weeks shown, including those Means flagged with an 'X'. The SD Wks is an indication of that laboratory's ability to obtain constant results from week to week.
Wks	-	The number of weeks included in the cumulative period.
Inst	-	The two letter instrument code. Codes are summarized at the bottom of the last analysis page.

Consensus Data

Grand Mean	-	The average of the Means for all the participants, excluding those laboratories flagged with an 'X,' reporting data for the number of weeks included in the cumulative period.
Avg SD	-	For the cumulative period, the average of the within-laboratory standard deviations (SD's) for all the participants, excluding those laboratories flagged with an 'X'.
SD btwn Labs	-	For the cumulative period, the standard deviation of the laboratory Means about the Month Mean, excluding those laboratories flagged with an 'X'.
SD btwn Wks	-	For the cumulative period, the average of the laboratory between week standard deviations for all the participants, excluding those laboratories flagged with an 'X'.
Labs Incl	-	The number of laboratory Means included in the Grand Mean.

Any laboratory that receives a 'flag' following a mean or standard deviation should refer to the chart below for an explanation of the data flag symbol:

<u>Flag</u>	<u>Explanation</u>
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Data Flags "X" and "*" indicate a laboratory's performance on an average value differed from the consensus.

Data Flags "H" and "L" indicate a laboratory's performance on a standard deviation differed from the consensus.

Flags assigned to Weekly Means, Monthly Mean and Cumulative Mean:

- | | |
|---|--|
| X | Excluded from the weekly means, monthly means and/or the cumulative mean. Immediate review of data and/or testing procedure is recommended. |
| * | Included in the weekly means, monthly means and/or the cumulative mean; however, lab should review testing procedure and monitor future results. |

Flags assigned to Weekly Means:

- | | |
|---|--|
| H | Indicates high within-laboratory standard deviation. The laboratory SD for each week is not shown, but laboratory average SD and consensus average SD values are shown. |
| L | Indicates low within-laboratory standard deviation. The laboratory SD for each week is not shown, but laboratory monthly average SD and consensus average SD values are shown. |

Flags assigned to Monthly SD Wks and Cumulative SD Wks:

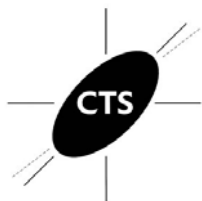
- | | |
|---|--|
| H | Indicates high variability between weekly means (high week-to-week variation). |
| L | Indicates low variability between weekly means (low week-to-week variation). |



Containerboard Interlaboratory Testing Program
Analysis 201
Top to Bottom Box Compression Strength, Corrugated Boxes - BX20
 TAPPI Official Test Method T804

Report #681
June 2026

WebCode	Monthly Results			Cumulative Results				
	Mean	CPV	SD	Mean	CPV	SD Months	Months	Inst
6UP2DP	487.7	-4.69 X	53.71	534.0	-1.91 *	31.06	4	LL
8HLM7N	600.3	-0.73	51.22	601.4	-0.17	7.06	4	LS
8JG78P	590.2	-1.08	55.26	559.8	-1.24	40.54	4	LG
9MWXWW	634.3	0.47	41.59	599.4	-0.23	26.62	4	ER
A4T63U	630.0	0.32	12.37	631.7	0.61	11.74	4	EX
AWGQLY	583.2	-1.32	43.34	592.6	-0.40	10.89	4	EX
BLPR8X	622.3	0.05	22.99	612.9	0.12	29.21	4	LO
DFW8GM	647.9	0.95	27.18	631.2	0.59	11.89	4	EX
E6DCET	580.4	-1.42	18.18	601.2	-0.18	35.51	4	XX
FPGK7X	616.6	-0.15	58.40	578.9	-0.75	28.70	4	EX
FR4ZYD	642.8	0.77	61.68	638.7	0.79	23.22	4	EX
GFNNKM	529.4	-3.22 X	13.92	568.8	-1.01	30.03	4	ER
JBNXQF	622.7	0.07	29.57	616.0	0.20	4.89	4	ER
JMG7L	652.8	1.13	6.69 L	622.5	0.37	27.81	4	EX
KXXMHF	601.2	-0.69	27.80	622.7	0.38	30.41	2	EX
NW7XNA	470.7	-5.29 X	56.14	514.0	-2.42 *	44.25	4	TB
NX2GPB	674.1	1.88	26.22	661.4	1.37	10.98	4	LG
QD333H	576.6	-1.56	32.54	596.6	-0.30	23.90	4	ER
RLVUQ3	621.7	0.03	30.58	619.8	0.30	25.04	4	LG
RXARTK	664.1	1.53	61.23	658.6	1.30	6.05	4	LM
TKYEE6	608.3	-0.44	86.24 H	629.5	0.55	32.87	4	LS
VVBK46	642.0	0.75	31.28	656.8	1.25	20.35	4	LS
WK9PKY	657.6	1.30	14.29	672.7	1.66	51.31	4	ET
XHBVXE	582.0	-1.37	65.97	561.7	-1.19	22.80	4	LG
XQPH94	605.0	-0.56	35.72	593.7	-0.37	16.07	2	LG
ZLNFxz	623.1	0.08	28.86	634.5	0.68	14.23	4	EX
Consensus (All Labs) Results								
Month Mean			620.83	Grand Mean		608.11		
Avg SD			42.45	Avg SD Months		26.52		
SD btwn Labs			28.38	SD btwn Labs		38.85		
Labs Incl			23	Labs Incl		26		



Containerboard Interlaboratory Testing Program
Analysis 201
Top to Bottom Box Compression Strength, Corrugated Boxes - BX20
TAPPI Official Test Method T804

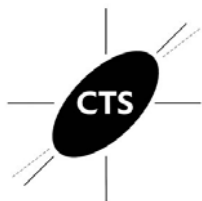
Report #681
June 2026

Consensus By Method

Test Method	Group Mean	SD btwn Group	Difference from Grand Mean	Labs Included
Hot melt adhesive sealing	612.90	24.78	7.94	8
Water based adhesive sealing	642.00	0.00	21.17	1
Clip sealing	623.95	32.06	3.11	13
Staple sealing	622.70	0.00	1.87	1

Key to Instrument Codes Reported by Participants

ER	Emerson 6200 Series	ET	Emerson 7200
EX	Emerson Apparatus (Model not specified)	LG	TLS / L.A.B. Validator Series
LL	Lansmont 76-5K	LM	Lansmont 122-15k
LO	Lansmont 152-30k	LS	Lansmont Squeezer
TB	TMI Monitor/Compression Tester, Model 17-70	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
 Analysis 202
Edgewise Compressive Strength, by T811, Corrugated Board - EC17
 TAPPI Official Test Method T811

Report #681
June 2026

WebCode	Monthly Results				Cumulative Results				Inst
	Mean	CPV	SD		Mean	CPV	SD Months	Months	
4HDCZU	43.6	0.51	0.75	L	41.8	0.09	2.02	4	TS
8HLM7N	40.9	0.11	4.41	H	40.1	-0.25	1.33	4	LD
A4T63U	45.6	0.80	2.26		45.7	0.85	0.63	4	LC
BHQGCY	27.6	-1.82 *	2.38		32.0	-1.83 *	4.24	4	TH
FPGK7X	43.1	0.44	1.41		43.8	0.48	0.88	4	EX
FR4ZYD	45.4	0.77	1.74		45.2	0.75	1.26	4	LC
KXT3UD	38.7	-0.21	1.35		43.5	0.42	4.54	4	TD
NW7XNA	46.0	0.87	0.63	L	46.0	0.91	0.00	1	LC
QD333H	30.0	-1.48	2.65		34.1	-1.43	3.91	4	EN
Consensus (All Labs) Results									
Month Mean			40.09	Grand Mean			41.36		
Avg SD			2.24	Avg SD Months			2.79		
SD btwn Labs			6.84	SD btwn Labs			5.09		
Labs Incl			9	Labs Incl			9		

Key to Instrument Codes Reported by Participants

EN	Emerson 2200	EX	Emerson (model not specified)
LC	L&W Crush Tester 48	LD	L&W Crush Tester 248
TD	TMI Digital Crush Tester, Model 17-09	TH	TMI Monitor/Compression Tester, Model 17-76
TS	TMI Digital Crush Tester, Model 17-56		



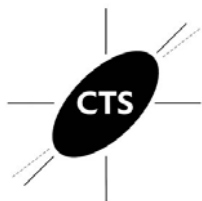
Containerboard Interlaboratory Testing Program
Analysis 203
Edgewise Compressive Strength by T839, Corrugated Board - EC17
TAPPI Official Test Method T839

Report #681
June 2026

WebCode	Monthly Results				Cumulative Results				Inst
	Mean	CPV	SD		Mean	CPV	SD Months	Months	
4HDCZU	42.8	-0.51	0.64	L	41.3	-1.33	1.14	4	TS
6RDLJN	39.3	-1.78	4.07	H	43.4	-0.62	3.02	4	TS
86293N	46.7	0.90	4.56	H	44.3	-0.31	2.10	3	TE
8HLM7N	45.7	0.55	1.98		46.5	0.46	1.32	4	LD
8JG78P	48.5	1.58	2.42		49.7	1.55	1.24	4	MK
8WH24W	38.4	-2.11	*	1.07	40.6	-1.57	2.41	4	XX
9MWXWW	44.8	0.21		1.88	44.9	-0.10	2.72	4	LD
A4T63U	48.0	1.40		2.43	48.8	1.23	0.96	4	LC
B7F4WJ	43.0	-0.44		1.52	46.6	0.48	4.23	H 4	TU
BHQGCY	34.5	-3.53	X	0.98	39.1	-2.09	*	3.14 4	TH
BLPR8X	42.8	-0.51		1.51	43.0	-0.75	0.56	4	LD
FFP3RP	53.8	3.47	X	2.12	51.7	2.22	*	1.43 4	TG
FPGK7X	45.4	0.44		0.99	45.8	0.23	0.38	4	LY
FR4ZYD	46.0	0.67		1.26	47.7	0.87	1.22	4	LC
GFNNKM	47.4	1.15		1.05	46.8	0.55	0.70	4	EM
JBNXQF	42.0	-0.79		2.04	45.1	-0.04	3.35	4	LD
JMG7L	46.7	0.91		1.20	44.5	-0.23	2.37	4	LD
K2RGE	44.8	0.23		0.57	L 47.0	0.62	1.64	4	EM
KXT3UD	38.7	-2.01	*	1.35	43.4	-0.59	4.15	H 3	TD
KXXMHF	41.9	-0.83		2.97	42.3	-1.00	0.52	2	CT
NX2GPB	45.6	0.52		0.88	47.4	0.76	2.59	4	BU
PFCTTL	42.7	-0.55		1.14	44.0	-0.39	1.70	3	LD
QD333H	43.0	-0.43		1.12	42.5	-0.91	0.67	4	EN
QPZ4H8	46.6	0.86		0.63	L 48.5	1.12	1.68	3	LC
RXARTK	46.7	0.92		1.39	46.6	0.47	0.38	4	EM
TKYEE6	43.0	-0.42		1.36	44.4	-0.28	2.05	4	EM
VVBK46	43.0	-0.43		2.11	44.9	-0.09	1.62	4	EM
WGNX9W	47.3	1.14		1.39	48.6	1.16	1.00	4	EM
WK9PKY	42.4	-0.63		1.18	44.0	-0.39	1.57	4	TD
XQPH94	45.5	0.47		1.62	45.1	-0.04	1.11	3	EM
Y326XV	40.7	-1.27		1.20	39.5	-1.93	*	0.82 4	BU
ZC2G7U	46.3	0.78		2.07	47.9	0.93	1.43	4	EM

Consensus (All Labs) Results

Month Mean	44.19	Grand Mean	45.18
Avg SD	1.88	Avg SD Months	2.01
SD btwn Labs	2.76	SD btwn Labs	2.93
Labs Incl	30	Labs Incl	32



Containerboard Interlaboratory Testing Program
Analysis 203
Edgewise Compressive Strength by T839, Corrugated Board - EC17
TAPPI Official Test Method T839

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June 2026

Key to Instrument Codes Reported by Participants

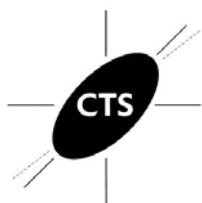
BU	Buchel Digital Crush Tester	CT	Con-Ten
EM	Emerson 1200 Series	EN	Emerson 2200
LC	L&W Crush Tester 48	LD	L&W Crush Tester 248
LY	L&W 830	MK	Mark-10 ESM303
TD	TMI Digital Crush Tester, Model 17-09	TE	TMI Monitor/Compression Tester, Model 17-60
TG	TMI Digital Crush Tester, 17-76	TH	TMI Monitor/Compression Tester, Model 17-76
TS	TMI Digital Crush Tester, Model 17-56	TU	TMI Universal Crush Tester (TMI K440)
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
Analysis 205
Bursting Strength (Mullen), 42 lb Linerboard - 42N1
 TAPPI Official Test Method T807

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results						Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks		
64U74K_AL	126.1 H	118.3	124.7	123.7	123.2	1.39	12.9	3.4	120.6	1.11	11.7	3.7	12	AL	
6EA474_AL	111.1	105.9	106.8	110.3	108.5	-1.04	9.3	2.6	108.7	-1.32	8.8	1.7	16	XX	
76H6T3_AL	122.5	119.6	118.5	116.3	119.2	0.73	9.8	2.6	120.5	1.11	9.8	2.9	16	AL	
77DMU4_AL	117.0	114.2	112.2	117.6	115.2	0.07	7.6	2.5	114.6	-0.11	8.0	2.3	12	AL	
7Z8RB4	105.4	104.6	No DATA	No DATA	105.0	-1.63	12.6	0.6	108.7	-1.32	8.2	2.2	14	LC	
7ZPZ2K_AL	125.9 H	118.2	126.5 *	126.8 H	124.3	1.58	16.3	4.1	121.2	1.25	11.4	4.7	16	AL	
86293N	115.5	118.1	120.7	121.0	118.8	0.66	9.1	2.6	114.5	-0.13	9.4	3.9	16	LC	
8HLM7N	113.0	115.6	110.0	116.3	113.7	-0.18	8.4	2.8	115.6	0.09	9.0	2.9	16	LA	
8TMBVZ_AL	120.2	115.3	114.5	No DATA	116.7	0.31	9.3	3.1	117.0	0.38	8.5	2.2	10	AL	
A4T63U	115.5	117.1	118.8	112.4	115.9	0.19	8.9	2.7	114.7	-0.08	8.6	2.8	16	AH	
AQ8Q2F	112.8	114.1	111.5	No DATA	112.8	-0.34	5.7	1.3	111.6	-0.73	5.8	2.1	11	XX	
BHQGCY	115.7	116.1	113.3	120.7	116.4	0.27	7.8	3.1	118.8	0.75	7.7	3.1	16	TX	
BMKBAZ	105.4	109.2	109.9	107.2	107.9	-1.14	8.5	2.1	108.6	-1.33	8.3	2.1	16	LC	
CPMTML	133.3 *	130.3 *	118.7	130.9 *	128.3	2.24 *	10.6	6.5 H	126.1	2.25 *	10.8	5.4	12	XX	
DNAJ8T_AL	111.6	111.2	98.3 *	112.0	108.3	-1.09	7.6	6.6 H	110.4	-0.97	6.9	4.3	16	AL	
ETKWPR_AL	122.3	122.4	121.2 H	123.7	122.4	1.26	9.4	1.0	120.4	1.07	10.0	2.2	16	AL	
HMMBCM	112.9	114.1	114.5 L	112.6	113.5	-0.21	4.6	0.9	114.1	-0.20	5.4	1.0	16	LJ	
JARJ4N_AL	97.9 *	103.5	101.0 *	103.5	101.5	-2.22 *	7.9	2.7	104.7	-2.14 *	7.7	3.1	16	AL	
JBNXQF	111.4	114.5	114.3	108.8	112.2	-0.43	10.6	2.7	111.5	-0.75	8.8	3.3	16	LA	
JBNXQF_AL	113.9	118.6	112.6	113.3	114.6	-0.04	10.2	2.7	115.0	-0.02	9.7	3.3	16	AK	
JMGG7L	121.6	122.0	121.8	117.6	120.8	0.98	6.5	2.1	119.0	0.79	6.4	4.5	16	AH	
K2WYDF_AL	125.9	118.3	112.9	119.9	119.2	0.73	8.6	5.4	119.0	0.78	8.6	4.4	16	AL	
K4YYDD	102.8	100.9 *	105.7	98.5 *	102.0	-2.14 *	7.5	3.0	106.1	-1.86	7.2	3.9	16	TP	
KXXMHF	121.5	114.5 H	120.5	117.0	118.4	0.59	10.2	3.2	118.8	0.74	10.9	2.2	8	XX	
LBCA4J_AL	118.2	120.4	119.5	119.3	119.3	0.75	6.9	0.9	117.6	0.51	8.5	3.6	16	AL	
M8XW2B	111.2	112.9	107.2	109.4	110.2	-0.77	8.0	2.4	110.8	-0.89	8.2	2.9	16	LA	
MC8D9D	125.9	122.0	114.3	128.6 *	122.7	1.31	8.7	6.2	122.2	1.45	8.0	3.9	16	XX	
MFLMLG	123.9	118.9	115.4	112.1	117.6	0.45	10.0	5.1	119.5	0.90	8.7	3.6	16	LJ	
MZDUU9	110.4 L	111.2 L	108.5	110.9	110.3	-0.76	3.8	1.2	109.2	-1.23	4.0	1.3	16	XX	
NCHC3M	107.8	102.3 *	106.1	106.1	105.6	-1.54	7.4	2.3	113.1	-0.42	8.1	5.8	14	TB	
NW7XNA	103.2	111.1	108.1	104.8	106.8	-1.33	10.8	3.5	109.0	-1.27	9.2	4.1	16	XX	
P4NQCE	122.9	122.4	125.8	121.8	123.2	1.40	9.0	1.8	121.9	1.39	5.3	6.5	16	LA	
Q9DMEB_AL	114.2	113.5	113.6	117.9	114.8	-0.01	8.8	2.1	114.5	-0.13	8.8	1.8	16	AL	
QCTXRE	120.2	115.4	117.2	109.4	115.6	0.12	8.2	4.5	115.5	0.07	9.6	4.0	16	LC	
QPLG96	115.7	114.9	119.7	116.1	116.6	0.30	9.7	2.1	119.0	0.78	9.3	2.4	16	LA	



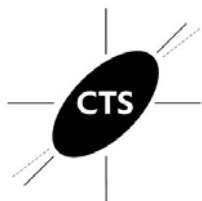
Containerboard Interlaboratory Testing Program
Analysis 205
Bursting Strength (Mullen), 42 lb Linerboard - 42N1
 TAPPI Official Test Method T807

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results					Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	
TNYPA6	109.3	110.8	117.0	109.4	111.6	-0.53	8.3	3.7	113.2	-0.40	7.2	2.9	12	AH
TPV7M2	117.4	117.8	120.2	121.4	119.2	0.73	9.2	1.9	120.5	1.11	8.4	2.3	12	XX
U4BQGF	113.3	116.1	112.8	113.5	113.9	-0.15	7.1	1.5	116.0	0.18	8.3	3.3	16	LA
U4BQGF_AL	115.2	112.4	113.2	112.4	113.3	-0.26	9.6	1.3	115.9	0.16	9.1	4.4	16	AL
UWC23W_AL	110.5	114.6	117.4	112.3	113.7	-0.19	9.8	3.0	113.4	-0.36	8.9	3.8	16	AL
VKT7XG	116.4	115.8	114.7	114.8	115.4	0.10	9.6	0.8	114.7	-0.09	9.0	2.8	16	ME
WGNX9W_AI	115.4	110.9	107.0	108.2 L	110.4	-0.74	7.0	3.7	109.9	-1.08	8.5	3.0	16	AL
XLXBQV	107.5	109.1	109.7	110.0	109.1	-0.95	9.0	1.1	108.6	-1.34	9.2	2.1	12	LZ
YAZUCE	127.4 L	127.2 *	120.0	123.6 L	124.6	1.62	4.5	3.5	122.7	1.56	6.1	4.0	16	LA
ZKCJQA	119.5	110.9	113.4	115.5	114.8	0.00	8.9	3.6	114.9	-0.06	8.8	3.4	16	LA
ZT7NLW_AL	115.8	117.2	112.7	111.1	114.2	-0.10	7.3	2.8	114.1	-0.21	8.2	3.8	16	AL
Consensus (All Labs) Results														
Wk Mean	115.71	114.87	114.27	114.85	Month Mean	114.82			Grand Mean	115.13				
Avg SDr	9.71	8.47	8.83	8.74	Avg SD	8.99			Avg SD	8.54				
SD btwn Labs	7.30	5.95	6.16	6.88	SD btwn Labs	6.02			SD btwn Labs	4.88				
Labs Incl	46	46	45	43	SD btwn Wks	3.17			SD btwn Wks	3.45				
Labs Excl	0	0	0	0	Labs Incl	46			Labs Incl	46				
Labs not Rcvd	0	0	1	3										

Key to Instrument Codes Reported by Participants

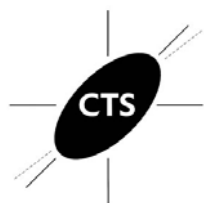
AH	Perkins Model AH	AK	L & W Autoline 300
AL	L & W Autoline 400	LA	L&W Bursting Strength Tester
LC	L&W Autoline (205 Enrollment)	LJ	L&W Bursting Strength Tester J-Type
LZ	L&W (model not specified)	ME	Messmer Automatic Burst Tester ME-06
TB	TMI Monitor/Burst 1000	TP	Technidyne PROFILE/Plus
TX	TMI Monitor/Burst (model not specified)	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
Analysis 207
Bursting Strength (Mullen), 31 lb Linerboard - 31K1
 TAPPI Official Test Method T807

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
64U74K_AL	77.4	72.7	76.0	72.0	74.5	-0.19	6.2	2.6	74.3	-0.36	5.3	2.5	8	AL
6EA474_AL	72.0	71.6	71.1	71.6	71.6	-1.03	4.8	0.4	72.0	-1.20	4.8	1.6	12	XX
76H6T3_AL	78.7	81.0	78.9	72.8	77.9	0.76	4.5	3.5	78.8	1.28	4.3	2.2	12	AL
77DMU4_AL	73.3	74.9	79.6	76.1	75.9	0.21	6.9	2.7	74.8	-0.17	6.5	2.3	8	AL
7Z8RB4	70.9	70.3	No DATA	No DATA	70.6	-1.32	5.4	0.5	73.2	-0.77	4.9	1.9	10	LA
7ZPZ2K_AL	78.5	78.7	75.0	81.2	78.4	0.91	5.7	2.6	76.9	0.59	4.9	2.6	12	AL
86293N	69.2	74.5	78.2	72.3	73.6	-0.47	6.5	3.8	73.4	-0.68	6.5	2.5	12	LC
8HLM7N	74.0	75.5	74.0	72.4	74.0	-0.35	6.9	1.3	76.3	0.37	6.9	2.9	12	LA
8TMBVZ_AL	78.9	No DATA	75.9	No DATA	77.4	0.64	4.5	2.1	75.7	0.16	4.6	2.4	6	AL
A4T63U	78.7	74.3	74.9	78.0	76.5	0.37	5.3	2.2	76.1	0.30	5.7	2.5	12	AH
AQ8Q2F	77.5	76.8	76.5	No DATA	76.9	0.49	3.9	0.5	76.4	0.40	4.0	1.4	6	XX
BHQGCY	79.1	82.7	82.8	* 80.3	81.2	1.73	5.5	1.8	81.6	2.33	* 5.5	1.7	12	TX
BMKBAZ	70.6	73.5	70.7	72.0	71.7	-1.01	6.7	1.4	71.3	-1.47	5.3	1.5	12	LC
CPMTML	79.0	73.3	72.0	H 74.8	74.8	-0.12	8.7	3.0	76.3	0.39	8.5	2.8	12	XX
DNAJ8T_AL	77.4	78.4	78.5	79.1 L	78.4	0.90	3.4	0.7	77.9	0.95	3.8	1.6	12	AL
ETKWPR_AL	78.8	78.2	77.3	76.8	77.8	0.74	5.5	0.9	76.2	0.35	5.8	1.9	12	XX
HMMBCM	73.9	73.2	73.1	72.1	73.1	-0.61	4.2	0.8	72.9	-0.87	4.2	0.8	12	LJ
JARJ4N_AL	68.5	71.8	66.7	* 72.5	69.9	-1.53	5.8	2.7	71.0	-1.58	5.6	2.5	12	AL
JBNXQF	75.4 H	82.5	80.7	80.1	79.7	1.28	7.7	3.0	75.6	0.13	6.5	3.9	12	LC
JBNXQF_AL	75.6	77.7	77.2	78.3	77.2	0.57	5.3	1.2	76.5	0.45	5.7	1.8	12	AK
JMGG7L	81.6	78.4	79.2	76.4	78.9	1.06	6.3	2.2	77.4	0.77	5.9	4.3	12	AH
K2WYDF_AL	80.6	78.5	77.5	73.5 H	77.5	0.66	11.3	3.0	78.7	1.24	9.0	2.3	12	AL
K4YYDD	69.1	68.8	70.9	68.4	69.3	-1.69	5.4	1.1	72.7	-0.93	5.3	3.2	12	TP
KXXMHF	75.0	82.5	79.0	73.5	77.5	0.66	6.0	4.1	77.3	0.72	6.5	2.7	12	XX
LBCA4J_AL	75.3	77.3	79.9	71.7	76.0	0.24	6.8	3.4	74.6	-0.25	5.7	2.8	12	AL
M8XW2B	65.7 *	71.8	69.1	67.3	68.5	-1.93 *	5.6	2.6	69.8	-1.99 *	5.3	2.5	12	LA
MC8D9D	80.1	82.1	78.9	83.1 *	81.1	1.68	6.5	1.9	79.8	1.64	5.8	4.1	12	XX
MFLMLG	72.6	75.4	72.3	70.5	72.7	-0.72	6.5	2.1	75.3	0.02	5.7	2.9	12	LJ
MZDUU9	77.0 L	77.1 L	75.2 L	76.5	76.5	0.36	2.2	0.9	76.5	0.45	2.6	1.1	12	XX
NCHC3M	69.5	70.6	69.7	69.3	69.8	-1.55	5.4	0.6	73.4	-0.67	5.5	3.3	12	TB
NW7XNA	77.0	74.4	74.6	68.4	73.6	-0.45	4.7	3.7	72.8	-0.89	5.6	2.3	12	XX
Q9DMEB_AL	80.3	75.6	78.9	77.0	78.0	0.79	3.7	2.0	76.4	0.43	4.4	1.9	12	AL
QCTXRE	71.5	71.3	73.5	70.7	71.8	-0.99	6.8	1.2	73.6	-0.63	6.6	3.1	12	LC
QPLG96	77.0	78.0	75.0	76.0	76.5	0.36	7.9	1.3	76.5	0.44	7.2	2.3	12	LA
R74XP8	78.6	80.0	80.6	83.6 *	80.7	1.58	6.6	2.1	80.3	1.84	7.2	2.9	12	AX



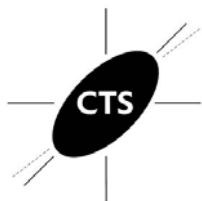
Containerboard Interlaboratory Testing Program
Analysis 207
Bursting Strength (Mullen), 31 lb Linerboard - 31K1
 TAPPI Official Test Method T807

Report #681
June 2026

Consensus (All Labs) Results															
Wk Mean	75.10	75.55	75.48	74.72	Month Mean	75.20			Grand Mean	75.27					
Avg SDr	6.06	5.93	6.01	5.74	Avg SD	5.91			Avg SD	5.71					
SD btwn Labs	3.97	3.81	3.69	4.25	SD btwn Labs	3.49			SD btwn Labs	2.73					
Labs Incl	46	45	45	43	SD btwn Wks	2.08			SD btwn Wks	2.49					
Labs Excl	0	0	0	0	Labs Incl	46			Labs Incl	46					
Labs not Rcvd	0	1	1	3											

Key to Instrument Codes Reported by Participants

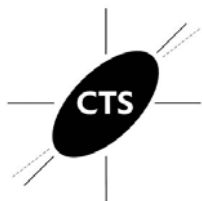
AH	Perkins Model AH	AK	L & W Autoline 300
AL	L & W Autoline 400	AX	Perkins Mullen Tester (model not specified)
LA	L&W Bursting Strength Tester	LC	L&W Autoline (207 Enrollment)
LJ	L&W Bursting Strength Tester J-Type	LZ	L&W (model not specified)
TB	TMI Monitor/Burst 1000	TP	Technidyne PROFILE/Plus
TX	TMI Monitor/Burst (model not specified)	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
Analysis 215
Ring Crush, 42 lb Linerboard - 42N1
TAPPI Official Test Method T822

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
6EA474	99.4	98.4	98.9	98.6	98.8	0.33	2.5	0.4	97.2	-0.34	2.5	1.4	16	LD
77DMU4	101.5	98.9	98.8	99.8	99.8	0.65	2.8	1.2	100.1	0.90	3.2	2.0	12	LD
7Z8RB4	98.5	95.7	No DATA	No DATA	97.1	-0.25	2.9	2.0	97.4	-0.25	3.5	1.4	14	LD
86293N	104.5	102.2	104.5 *	102.4	103.4	1.85	2.7	1.3	101.9	1.70	3.8	3.3	16	MB
8HLM7N	101.7	100.6	101.2	100.9	101.1	1.10	2.3	0.5	99.1	0.49	2.5	1.8	16	LD
8TMBVZ	99.2	98.7	98.2	98.2	98.6	0.25	3.3	0.5	98.0	0.03	3.2	0.8 L	16	LC
9MWXWW	95.0	99.2	97.7	98.0	97.5	-0.11	2.7	1.8	99.2	0.53	3.7	2.7	16	LD
A4T63U	98.2	97.9	95.8	99.6	97.8	0.01	2.9	1.6	98.7	0.34	3.0	1.7	16	LC
AQ8Q2F	95.2	92.1	95.7	H No DATA	94.3	-1.16	4.8	2.0	97.0	-0.40	5.6	10.2 H	11	TU
AVKB92	88.8 *	86.5 XL	84.2 X	87.4 *	86.7	-3.68 X	1.7	1.9	90.2	-3.33 X	2.3	3.1	16	LD
BAYYXP	89.7 *	92.2	92.9	91.4	91.5	-2.09 *	3.7	1.4	93.5	-1.91	4.1	3.9	16	EM
BMKBAZ	93.8	97.7	95.8	95.3	95.6	-0.72	3.0	1.6	95.6	-1.02	3.4	2.4	16	LD
ETKWPR	77.6 XH	70.0 XH	74.4 XH	87.6 *H	77.4	-6.78 X	8.2	7.5 H	93.0	-2.14 *	6.4	12.4 H	16	LZ
F32ZAW	100.6	95.6	99.5	104.7	100.1	0.76	3.3	3.7 H	102.4	1.90	3.1	3.5	15	TU
FDHKUT	103.0	93.2	95.7	96.2	97.0	-0.26	2.8	4.2 H	99.7	0.74	3.1	4.6	16	LD
FFP3RP	98.5	98.4	98.3 L	98.3	98.4	0.19	1.9	0.1 L	98.5	0.23	2.7	1.3	16	TH
FPGK7X	100.2	98.1	100.8	96.9	99.0	0.39	2.4	1.8	99.7	0.73	2.8	1.2	14	LG
HMMBCM	97.8	98.1	99.3	97.4	98.2	0.12	3.3	0.8	97.8	-0.08	2.9	1.0	16	LD
JARJ4N	99.6	101.9	100.5	99.8	100.4	0.88	2.3	1.1	99.2	0.55	2.6	1.3	16	LD
K2WYDF	97.2	94.9	95.7	96.5	96.1	-0.57	2.5	1.0	96.8	-0.49	2.9	1.2	16	LD
K4YYDD	97.3	99.1	97.6	97.9	98.0	0.06	2.7	0.8	98.5	0.22	2.7	1.3	16	TX
MC8D9D	102.0	96.2	100.0 H	98.6	99.2	0.46	4.6	2.4	99.9	0.83	4.5	2.4	16	LD
MZDUU9	79.3 X	73.2 X	73.7 XH	75.2 X	75.4	-7.45 X	4.3	2.8	76.6	-9.19 X	4.4	2.7	16	MZ
NCHC3M	99.3	100.6	97.8	100.8	99.6	0.61	3.4	1.4	99.8	0.77	2.9	1.0	14	LD
NJKJKB	97.3 L	97.8 L	97.4 L	98.4 L	97.7	-0.02	1.1	0.5	97.7	-0.12	1.0	0.4 L	8	MZ
NW7XNA	93.1 H	96.6	94.2	96.9	95.2	-0.87	4.2	1.8	96.6	-0.58	4.0	1.7	16	XX
P4NQCE	100.0	102.2	96.9	103.8	100.7	0.97	3.1	3.0	98.5	0.25	2.3	3.2	16	TU
Q9DMEB	72.7 X	71.9 X	73.6 X	72.2 X	72.6	-8.37 X	2.5	0.7	69.8	-12.11 X	4.4	2.9	16	LD
QCTXRE	101.6	100.1	98.9	97.8	99.6	0.59	2.4	1.6	97.5	-0.20	2.3	1.9	16	LD
QD333H	95.0	93.6	94.1	94.2 L	94.2	-1.19	2.4	0.6	92.1	-2.50 *	2.6	1.4	16	LC
QPZ4H8	95.8	96.2	96.5	95.5	96.0	-0.59	2.7	0.4	96.7	-0.52	2.9	1.7	12	LC
R74XP8	94.5 H	92.5 H	93.8	92.9 H	93.4	-1.45	5.1	0.9	88.3	-4.14 X	6.2	5.4	16	LD
RXUBZD	104.4	106.5 *	104.8 *	106.2 *	105.4	2.53 *	2.4	1.0	101.9	1.68	2.3	2.6	16	LD
U4BQGF	100.6	93.1	95.7	98.5	97.0	-0.28	3.7	3.3	99.5	0.64	3.2	2.8	16	LD
UXHJY7	100.8	99.7	98.9	100.8	100.0	0.74	3.2	0.9	99.1	0.48	5.8	4.5	16	MB



Containerboard Interlaboratory Testing Program
 Analysis 215
Ring Crush, 42 lb Linerboard - 42N1
 TAPPI Official Test Method T822

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results					Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	
VJWQN6	93.9	91.3 H	95.8	95.1	94.0	-1.26	4.6	2.0	86.8	-4.81 X	4.9	8.0 H	8	TH
VKT7XG	105.0	104.0	101.8	101.0	103.0	1.71	2.4	1.9	99.1	0.47	2.8	2.9	16	LD
XLXBQV	93.2	94.8	93.3	92.5	93.4	-1.45	3.1	0.9	98.4	0.19	2.9	3.2	16	XX
YAZUCE	94.2	92.9	91.0 *	92.1	92.6	-1.75	2.7	1.3	93.4	-1.97 *	3.3	1.8	16	LC
YCM96U	98.4 L	98.1 L	98.3 L	98.9 L	98.4	0.21	0.5	0.3	97.5	-0.19	0.4	1.8	12	RS
YVFEBZ	97.1	98.3 L	98.3 L	98.8	98.1	0.11	1.3	0.7	97.9	-0.03	1.1	0.6 L	8	MZ
ZC2G7U	96.0	97.0	96.5	95.8	96.3	-0.50	3.6	0.6	95.8	-0.94	3.3	1.1	16	EM

					Consensus (All Labs) Results			
Wk Mean	97.99	97.48	97.60	97.50	Month Mean	97.81	Grand Mean	97.96
Avg SDr	3.06	3.18	3.13	3.13	Avg SD	3.08	Avg SD	3.32
SD btwn Labs	3.81	3.49	2.97	4.05	SD btwn Labs	3.01	SD btwn Labs	2.33
Labs Incl	39	38	37	38	SD btwn Wks	1.69	SD btwn Wks	3.47
Labs Excl	3	4	4	2	Labs Incl	38	Labs Incl	37
Labs not Rcvd	0	0	1	2				

Key to Instrument Codes Reported by Participants

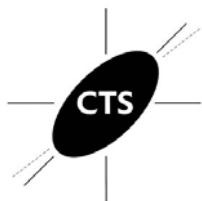
EM	Emerson 1200	LC	L&W Crush Tester 48
LD	L&W Crush Tester 248	LG	L&W 753
LZ	L&W Crush Tester (model not specified)	MB	Messmer Buchel K440
MZ	Messmer Buchel (model not specified)	RS	Regmed Digital Crush Tester CT-2000
TH	TMI Compression Tester, Model 17-76	TU	TMI Universal Crush Tester (TMI K440)
TX	TMI Digital Crush Tester (model not specified)	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
Analysis 217
Ring Crush, 31 lb Linerboard - 31K1
TAPPI Official Test Method T822

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
6EA474	73.9	74.6	74.6	73.8	74.2	-0.06	2.3	0.4	74.2	0.13	2.3	0.6 L	12	LD
77DMU4	73.5	73.8	76.1	74.4	74.4	0.02	3.5	1.1	74.2	0.14	3.2	1.3	8	LD
7Z8RB4	74.5	73.4	No DATA	No DATA	74.0	-0.16	2.9	0.8	74.0	0.05	2.9	1.0	9	LD
86293N	77.3	72.1 H	79.4	75.2	76.0	0.61	4.7	3.1	78.6	1.52	4.8	2.9	12	MB
8HLM7N	74.1	79.3	75.7	76.1	76.3	0.71	2.4	2.2	74.3	0.16	2.7	2.1	12	LD
8TMBVZ	72.8	74.4	74.6	75.2	74.3	-0.06	3.8	1.0	72.8	-0.34	3.8	1.5	12	LC
9MWXWW	74.3	72.8	74.7	75.4	74.3	-0.05	3.0	1.1	74.0	0.07	3.3	1.1	12	LD
A4T63U	73.7	74.3	72.6	74.7	73.8	-0.21	2.7	0.9	74.3	0.14	2.4	0.8 L	12	LC
AQ8Q2F	72.3	72.4	72.1 H	No DATA	72.2	-0.83	4.7	0.2 L	71.7	-0.67	4.4	1.2	6	TU
AVKB92	66.3 *	66.3 *L	65.0 X	64.2 *	65.5	-3.40 X	2.1	1.0	69.1	-1.51	2.2	3.7	12	LD
BAYYXP	71.7	73.0	69.9	69.2	70.9	-1.31	3.8	1.7	69.5	-1.37	3.7	2.7	12	EM
BMKBAZ	76.0	78.4	77.8	75.7	77.0	0.98	3.1	1.4	74.0	0.07	3.1	2.9	12	LD
ETKWPR	59.2 XH	57.7 XH	58.2 XH	64.0 *H	59.8	-5.57 X	7.1	2.9	67.7	-1.95 *	6.8	10.5 H	12	LZ
F32ZAW	76.1	74.8 L	79.3	79.6	77.4	1.15	2.7	2.4	80.5	2.14 *	3.5	3.7	12	TU
FDHKUT	70.3	73.3	76.7	71.1	72.8	-0.59	2.8	2.9	74.3	0.15	2.6	2.8	12	LD
FFP3RP	73.6	75.1	73.4	71.5	73.4	-0.38	2.6	1.5	74.3	0.14	2.2	1.2	12	TH
FPGK7X	75.2	75.7	74.0	73.9	74.7	0.12	1.9	0.9	75.4	0.51	2.1	1.0	12	LG
HMMBCM	76.3	79.5	77.4	77.9	77.8	1.29	2.5	1.4	76.8	0.94	2.8	1.3	12	LD
JARJ4N	73.0 H	72.8	74.0	74.4	73.6	-0.32	3.9	0.8	74.7	0.26	3.3	1.1	12	LD
K2WYDF	77.2 L	77.2	77.0	77.5	77.2	1.08	2.0	0.2 L	76.0	0.69	2.6	1.6	12	LD
K4YYDD	77.3	78.9	74.9	73.1	76.1	0.63	2.2	2.5	75.0	0.36	2.3	1.7	12	TH
MC8D9D	74.7	70.3	66.3 X	70.7	70.5	-1.48	2.9	3.4	71.5	-0.74	4.0	2.3	12	LD
MZDUU9	61.9 XH	59.9 XH	59.8 XH	60.4 XH	60.5	-5.29 X	6.0	1.0	60.5	-4.25 X	5.9	2.1	12	MZ
NCHC3M	77.7	77.3	74.4	75.9	76.3	0.74	4.0	1.5	73.5	-0.10	3.1	3.0	12	LC
NJKJKB	74.8 L	76.8	76.8 L	76.3 L	76.2	0.67	1.1	0.9	75.7	0.60	1.0	1.0	8	MZ
NW7XNA	71.5	68.6 H	72.1	70.6	70.7	-1.40	4.7	1.5	72.5	-0.42	4.5	4.0	12	XX
Q9DMEB	57.0 X	56.1 X	56.5 X	54.2 X	55.9	-7.02 X	3.0	1.2	54.3	-6.23 X	5.5	2.0	12	LD
QCTXRE	78.2	79.1	78.4	73.2	77.2	1.07	2.6	2.7	74.2	0.14	2.9	2.9	12	LD
QD333H	73.1	73.3	73.3	74.4	73.5	-0.33	3.0	0.6	72.2	-0.53	2.9	1.8	12	LC
QPZ4H8	73.0	70.1	72.4	70.5	71.5	-1.11	3.7	1.4	72.4	-0.47	3.0	1.7	12	LC
R74XP8	76.0	72.5	71.3	71.5	72.8	-0.59	3.9	2.2	68.2	-1.78	5.2	5.7	8	LD
RXUBZD	81.0 *	81.1	80.1 *	80.6 *	80.7	2.39 *	2.5	0.5	79.8	1.91	2.1	1.3	12	LD
U4BQGF	72.2	76.0	73.8	74.1	74.0	-0.14	2.5	1.6	75.9	0.68	2.8	1.9	12	LD
UXHJY7	87.0 X	83.8 *	85.3 X	86.9 X	85.7	4.31 X	3.2	1.5	80.0	1.97 *	4.2	5.1	12	MB
VJWQN6	71.0 H	71.8	74.9	72.9	72.6	-0.67	4.2	1.7	66.6	-2.32 *	4.8	6.6 H	8	TH



Containerboard Interlaboratory Testing Program
Analysis 217
Ring Crush, 31 lb Linerboard - 31K1
 TAPPI Official Test Method T822

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results					Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	
VKT7XG	82.1 *	83.9 *	76.0	75.8	79.5	1.92 *	2.3	4.1 H	76.0	0.70	3.1	3.4	12	LD
XLXBQV	70.9	68.4	69.6	68.9	69.5	-1.88	2.8	1.0	73.1	-0.22	2.5	3.0	12	LZ
YAZUCE	69.4	69.3	70.2	70.0	69.7	-1.78	2.5	0.4	70.1	-1.20	2.7	1.8	12	LC
YCM96U	75.0 L	74.5 L	74.8 L	75.2 L	74.9	0.19	0.5	0.3	73.4	-0.14	0.5	1.7	8	RS
YVFEBZ	75.0	75.9 L	75.9 L	76.6 L	75.8	0.55	1.1	0.6	75.8	0.64	1.1	0.6 L	8	MZ
ZC2G7U	73.1	70.8	73.1	72.5	72.4	-0.77	3.2	1.1	72.7	-0.35	3.0	0.8 L	12	EM

					Consensus (All Labs) Results			
Wk Mean	74.27	74.61	74.74	73.52	Month Mean	74.40	Grand Mean	73.82
Avg SDr	2.87	3.00	3.26	3.12	Avg SD	3.08	Avg SD	3.30
SD btwn Labs	3.05	4.02	2.67	3.58	SD btwn Labs	2.63	SD btwn Labs	3.14
Labs Incd	37	38	34	36	SD btwn Wks	1.73	SD btwn Wks	3.10
Labs Excl'd	4	3	6	3	Labs Incd	36	Labs Incd	39
Labs not Rcvd	0	0	1	2				

Key to Instrument Codes Reported by Participants

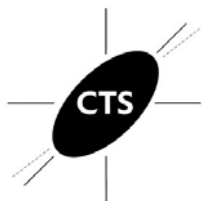
EM	Emerson 1200	LC	L&W Crush Tester 48
LD	L&W Crush Tester 248	LG	L&W 753
LZ	L&W Crush Tester (model not specified)	MB	Messmer Buchel K440
MZ	Messmer Buchel (model not specified)	RS	Regmed Digital Crush Tester CT-2000
TH	TMI Compression Tester, Model 17-76	TU	TMI Universal Crush Tester (TMI K440)
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
Analysis 223
STFI, 42 lb Linerboard - 42N1
TAPPI Official Test Method T826

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results						Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks		
64U74K_AL	50.8 XL	45.7 XL	45.7 XL	45.7 XL	47.0	24.41 X	0.0	2.5 H	40.5	19.35 X	0.0	11.1 H	12	AL	
6EA474_AL	24.7	23.7	24.3 H	24.0	24.2	-0.08	2.0	0.4	23.9	-0.53	3.4	0.4	16	XX	
76H6T3_AL	23.6	23.6	23.3	25.0	23.9	-0.42	1.5	0.8	24.2	-0.25	1.8	0.7	16	AL	
77DMU4_AL	25.3	24.4	25.0	26.0 *	25.2	1.00	2.1	0.7	25.5	1.41	1.9	0.6	12	AL	
7AZ3MK	23.9	23.5 H	22.8	24.2 H	23.6	-0.71	2.8	0.6	23.5	-1.07	2.6	0.7	16	LH	
7Z8RB4	24.0	24.0	No DATA	No DATA	24.0	-0.24	1.3	0.0	24.2	-0.23	1.6	0.6	14	LA	
7ZPZ2K_AL	20.7 X	22.6	21.8 *	23.9	22.3	-2.14 *	1.9	1.4	26.1	2.10 *	2.1	2.5 H	16	AL	
86293N	25.1	25.0	24.6 H	22.8	24.4	0.11	2.2	1.1	24.3	-0.09	2.0	0.8	16	LA	
8HLM7N	25.1 H	23.4	24.4	23.4	24.0	-0.22	2.2	0.8	23.6	-0.91	1.8	0.6	16	LY	
8TMBVZ	22.8	24.9 L	23.0	No DATA	23.6	-0.74	1.9	1.1	24.0	-0.47	1.8	1.1	10	LU	
8WH24W	22.6	24.5	23.3	23.8	23.5	-0.77	1.7	0.8	22.8	-1.84	1.7	1.1	16	XX	
9MWXWW	24.8	25.2	24.0	24.6	24.6	0.42	1.8	0.5	24.2	-0.19	1.8	0.5	16	LY	
A4T63U	24.7	23.4	24.0	24.6	24.2	-0.08	1.9	0.6	24.1	-0.31	1.8	0.6	16	LU	
AQ8Q2F	24.8	23.9	24.7	No DATA	24.5	0.25	2.1	0.5	24.0	-0.45	1.9	0.5	11	TT	
AVKB92	22.6 L	22.8 L	22.4	23.1 L	22.7	-1.65	1.1	0.3	22.7	-1.99 *	1.6	1.6	16	TT	
BLPR8X	24.6	24.7	25.0	24.6	24.7	0.50	1.9	0.2	23.8	-0.65	1.8	0.7	16	LH	
BMKBAZ	26.0	26.1	23.1	25.2	25.1	0.92	1.9	1.4	24.2	-0.19	2.1	1.2	16	LA	
CPMTML	23.5	22.6	23.0	23.6	23.2	-1.15	2.0	0.5	23.0	-1.59	1.9	0.6	16	XX	
DNAJ8T	24.6	24.7	24.2	23.5	24.2	-0.01	1.3	0.5	24.5	0.15	2.4	0.7	15	LU	
ETKWPR_AL	22.1 *	23.9	23.3	No DATA	23.1	-1.25	1.6	0.9	23.9	-0.61	1.8	1.0	7	AL	
F32ZAW	24.0	23.2 L	25.4	24.0	24.2	-0.11	1.6	0.9	24.5	0.18	1.8	0.9	16	LA	
FPGK7X	24.9	24.3	24.6	20.6 X	23.6	-0.68	1.5	2.0 H	24.7	0.36	1.7	1.2	16	BK	
JARJ4N_AL	24.6	24.3	24.1	24.3 H	24.3	0.08	1.9	0.2	24.4	0.07	1.6	0.7	16	AL	
JBNXQF_AL	20.7 X	23.3	22.2	21.6 X	22.0	-2.47 *	1.7	1.1	25.6	1.49	2.0	3.2 H	16	AK	
JDVFPC	24.4	24.7	23.6	23.9	24.2	-0.09	1.7	0.5	23.7	-0.74	1.7	0.5	12	LH	
K2WYDF_AL	22.6	23.7	24.1	23.5 L	23.5	-0.83	1.4	0.6	24.0	-0.44	2.0	1.0	13	AL	
L9AA78	25.7	25.2	25.4	25.5	25.5	1.29	1.5	0.2	24.9	0.60	1.4	0.4	16	LH	
LBCA4J_AL	25.5	26.7 *	24.0	25.2	25.3	1.15	1.8	1.1	26.5	2.55 *	4.2	1.7	16	AL	
M8XW2B	25.4	25.2	25.1 H	24.7	25.1	0.92	2.3	0.3	24.9	0.70	2.2	0.5	16	LH	
MC8D9D	36.2 X	36.8 X	35.8 X	36.8 X	36.4	13.06 X	2.0	0.5	35.4	13.19 X	2.6	1.3	8	ID	
MFLMLG	26.9 *	28.1 X	24.3	24.6	26.0	1.88	1.9	1.8 H	24.1	-0.35	2.1	1.6	16	LH	
MZDUU9	23.8	24.5	23.6	24.0	24.0	-0.30	2.0	0.4	23.7	-0.77	2.0	0.8	16	XX	
N9MH87	24.8	25.6	25.7	24.8	25.2	1.03	1.8	0.5	24.6	0.23	1.8	0.8	16	LU	
NCHC3M	23.4	23.7	23.7	23.7	23.6	-0.66	2.0	0.2	23.9	-0.62	1.9	0.9	13	LW	
NJKJKB	24.9 L	24.1 L	25.0 L	24.1 L	24.5	0.32	0.6	0.5	24.4	0.05	0.6	0.4	8	XX	



Containerboard Interlaboratory Testing Program
 Analysis 223
STFI, 42 lb Linerboard - 42N1
 TAPPI Official Test Method T826

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
P4NQCE	22.5 L	22.0 *	21.4 *	22.1 *	22.0	-2.42 *	1.7	0.5	22.9	-1.79	1.7	1.3	16	XX
PXWJU7	26.8 *H	24.8 H	26.4 *	25.2	25.8	1.69	2.3	0.9	25.1	0.89	1.9	0.9	16	LA
Q9DMEB	24.3	24.5	23.9	24.2	24.2	-0.03	1.7	0.3	24.4	0.09	1.8	0.5	16	LY
Q9DMEB_AL	24.6	25.4	24.8	23.9	24.7	0.46	1.8	0.6	24.7	0.39	1.8	0.6	16	AL
QCTXRE	25.5	25.4	24.5	24.7 H	25.0	0.83	2.4	0.5	24.4	0.01	1.9	0.6	16	LA
QD333H	24.1	23.9	23.9	24.1	24.0	-0.29	2.0	0.1	22.9	-1.76	1.8	0.7	16	LY
QPLG96	22.8	23.7	23.8	22.6	23.3	-1.07	1.5	0.6	25.2	1.04	1.7	1.9	16	LZ
R74XP8	25.1	25.4	25.1	25.1	25.2	1.01	1.6	0.1 L	25.0	0.78	1.6	0.7	16	LH
RFP2W7	23.3 L	No DATA	No DATA	No DATA	23.3	-1.02	0.8	0.0	22.8	-1.91	1.1	0.6	4	LH
U4BQGF_AL	24.5	23.7	23.6 L	23.4	23.8	-0.51	1.6	0.5	24.4	0.06	1.9	0.8	16	AL
UTPLAF	24.9	24.3 L	No DATA	No DATA	24.6	0.38	1.3	0.5	24.1	-0.29	1.7	0.4	14	LW
UWC23W_AL	29.9 X	31.6 X	30.1 X	30.1 XH	30.4	6.65 X	2.2	0.8	31.3	8.31 X	2.4	1.2	16	AL
UXHJY7	25.8	26.3 *	25.5	25.9	25.9	1.76	1.7	0.3	25.1	0.85	2.1	1.0	16	LA
VKT7XG	26.0	25.7	25.5	25.3	25.6	1.48	1.9	0.3	25.3	1.08	1.9	0.5	16	LH
VVBK46	24.9	25.0	25.8	23.2	24.7	0.48	2.0	1.1	25.1	0.85	2.1	0.8	16	TT
WGNX9W_AI	24.7	25.4	24.9	25.2	25.1	0.86	1.7	0.3	25.4	1.21	1.6	0.5	16	AL
XLXBQV	24.0	24.5	25.2	25.0 L	24.7	0.48	1.4	0.5	25.4	1.19	1.9	1.7	16	LZ
YAZUCE	24.5	24.1	23.8	24.5	24.2	-0.03	1.6	0.3	24.8	0.46	1.6	0.7	16	LA
YVFEBZ	24.1 L	24.2 L	24.5 L	24.1 L	24.2	-0.04	0.7	0.2	24.4	-0.02	0.7	0.3	8	XX
ZKCJQA	24.0	24.5	23.8	23.3	23.9	-0.39	1.8	0.5	24.3	-0.13	1.8	0.6	16	LY
ZT7NLW_AL	25.1 H	25.1	26.0	24.8	25.3	1.08	2.3	0.5	25.5	1.40	2.2	0.8	16	AL
Consensus (All Labs) Results														
Wk Mean	24.46	24.37	24.19	24.25	Month Mean	24.25			Grand Mean	24.37				
Avg SDr	1.84	1.84	1.75	1.81	Avg SD	1.79			Avg SD	1.95				
SD btwn Labs	1.07	0.97	1.08	0.86	SD btwn Labs	0.93			SD btwn Labs	0.83				
Labs Incl	51	51	50	45	SD btwn Wks	0.74			SD btwn Wks	1.03				
Labs Excl	5	4	3	5	Labs Incl	53			Labs Incl	53				
Labs not Rcvd	0	1	3	6										

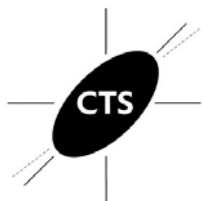


Containerboard Interlaboratory Testing Program
Analysis 223
STFI, 42 lb Linerboard - 42N1
TAPPI Official Test Method T826

Report #681
June 2026

Key to Instrument Codes Reported by Participants

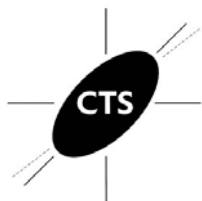
AK	L & W Autoline 300	AL	L & W Autoline 400
BK	Buchel Strip Compression Tester BK-155	ID	IDM Compression Tester
LA	L&W Autoline (223 Enrollment)	LH	L&W 282
LU	L&W 52 without moisture correction(was 53)	LW	L&W 53 with moisture correction (was 53M)
LY	L&W 152 without moisture correction	LZ	L&W (model not specified)
TT	TMI Short Span Compression, 17-34 (MB K455)	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
Analysis 225
STFI, 31 lb Linerboard - 31K1
TAPPI Official Test Method T826

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results						Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks		
64U74K_AL	34.3 XL	34.3 XL	34.3 XL	40.0 XL	35.7	16.05 X	0.0	2.9 H	36.5	21.23 X	0.0	2.2 H	8	AL	
6EA474_AL	20.4	20.3	20.1	20.2	20.2	-0.55	1.3	0.1	20.0	-0.82	1.3	0.2 L	12	XX	
76H6T3_AL	20.4	20.2	19.1 L	20.5	20.0	-0.78	1.6	0.7	20.2	-0.54	1.5	0.5	12	XX	
77DMU4_AL	20.7	20.8	22.0 H	21.3	21.2	0.47	1.6	0.6	21.2	0.79	1.6	0.5	8	AL	
7AZ3MK	20.3 H	19.9 H	20.4	20.1	20.2	-0.62	2.2	0.2	20.0	-0.87	2.0	0.6	12	LH	
7Z8RB4	21.0	20.9 H	No DATA	No DATA	20.9	0.19	2.1	0.1	20.5	-0.22	1.5	0.5	10	LW	
7ZPZ2K_AL	21.5	21.1	20.4	21.1	21.0	0.29	1.7	0.5	22.6	2.63 *	1.7	1.2	12	AL	
86293N	19.9	20.3	19.9	19.6 H	19.9	-0.89	1.6	0.3	20.8	0.15	1.5	0.7	12	LA	
8HLM7N	20.6	20.4	21.0	21.0	20.8	-0.01	1.4	0.3	20.0	-0.80	1.3	0.6	12	LY	
8TMBVZ	21.5	19.7	20.1	No DATA	20.4	-0.34	1.2	0.9	20.7	0.07	1.2	0.9	7	LU	
8WH24W	20.4	20.5	19.5	19.8	20.1	-0.74	1.3	0.5	19.9	-0.97	1.3	0.9	12	XX	
9MWXWW	20.0	21.2	20.8	20.5	20.6	-0.14	1.4	0.5	20.5	-0.15	1.4	0.4	12	LY	
A4T63U	20.5	20.0	19.9	20.5	20.2	-0.59	1.2	0.3	20.3	-0.50	1.3	0.3	12	LU	
AQ8Q2F	19.8	20.6	21.6	No DATA	20.7	-0.11	1.5	0.9	20.6	-0.10	1.6	0.6	6	TT	
AVKB92	19.2	19.1	18.3 *	20.6	19.3	-1.55	1.2	0.9	19.7	-1.31	1.4	1.0	12	TT	
BLPR8X	21.2	21.8	20.3	21.6	21.3	0.54	1.5	0.7	20.5	-0.18	1.4	0.8	12	LH	
BMKBAZ	21.8	22.2 H	19.9	20.8	21.1	0.42	1.8	1.0	21.0	0.42	1.8	0.9	12	LA	
CPMTML	20.6	20.2	19.8	20.5 H	20.3	-0.52	1.9	0.4	20.1	-0.72	1.7	0.7	12	XX	
DNAJ8T	21.6 L	22.0 L	21.9	20.4	21.5	0.77	1.2	0.7	21.3	0.93	1.2	1.1	11	LU	
ETKWPR_AL	19.9	20.2	20.8 H	No DATA	20.3	-0.53	1.7	0.5	20.2	-0.55	1.3	0.4	7	XX	
F32ZAW	21.4	21.6	21.1	21.6 L	21.4	0.72	1.3	0.2	21.3	0.94	1.4	0.5	12	LA	
FPGK7X	20.3	20.8	20.9	19.9 L	20.5	-0.30	1.3	0.5	20.6	-0.09	1.4	0.4	12	BK	
JARJ4N_AL	20.8	20.7	21.1	20.1	20.7	-0.08	1.4	0.4	20.4	-0.39	1.1	0.5	12	AL	
JBNXQF_AL	18.7 *	18.7 *	18.1 *	18.6 *	18.5	-2.40 *	1.1	0.3	20.3	-0.48	1.7	1.4	12	AK	
JDVFPC	21.9	21.3	21.5	21.3	21.5	0.81	1.4	0.3	20.8	0.24	1.4	0.8	8	LH	
K2WYDF_AL	19.5	18.8 *	20.7	19.2	19.6	-1.30	1.8	0.8	19.6	-1.42	1.7	0.8	7	AL	
L9AA78	23.2 XL	23.3 *	22.6	22.7 *	23.0	2.36 *	1.0	0.4	21.5	1.14	1.2	1.1	12	LH	
LBCA4J_AL	22.2	22.4	20.5	20.7	21.5	0.74	1.3	1.0	21.9	1.66	4.5	0.8	12	AL	
M8XW2B	23.8 XH	23.1 *	23.5 *	22.7 *	23.3	2.71 *	1.9	0.5	21.8	1.54	1.8	1.2	12	LH	
MC8D9D	33.2 XH	30.9 X	32.5 XL	30.9 XL	31.8	11.91 X	1.6	1.2	31.8	15.02 X	1.6	1.2	4	ID	
MFLMLG	25.2 X	25.6 X	22.6	22.9 *H	24.1	3.56 X	2.0	1.6 H	21.5	1.14	2.2	2.2 H	12	LH	
MZDUU9	21.5	20.5	19.3	19.6	20.2	-0.57	1.7	1.0	20.0	-0.84	1.6	0.9	12	TT	
N9MH87	22.4 *H	22.2	23.3 *	22.6 *	22.6	2.01 *	1.7	0.5	21.3	0.85	1.6	1.1	12	LU	
NCHC3M	20.5	20.3	20.0	19.9	20.2	-0.61	1.4	0.3	20.6	-0.07	1.6	0.7	11	LW	
NJKJKB	20.4 L	20.5 L	20.4 L	20.2 L	20.4	-0.41	0.5	0.1 L	19.8	-1.19	0.4	0.7	8	LZ	



Containerboard Interlaboratory Testing Program

Analysis 225

STFI, 31 lb Linerboard - 31K1

TAPPI Official Test Method T826

Report #681

June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
PXWJU7	20.6	20.0	22.3	21.1	21.0	0.27	1.4	1.0	20.9	0.41	1.3	0.6	12	XX
Q9DMEB	20.3	20.5	21.1	20.2	20.5	-0.25	1.6	0.4	20.2	-0.61	1.6	0.4	12	LU
Q9DMEB_AL	19.6	21.3	20.6	20.5 H	20.5	-0.28	1.9	0.7	20.3	-0.50	1.9	0.5	12	AL
QCTXRE	22.5 *	21.2	21.1	22.0	21.7	1.01	1.5	0.7	20.7	0.14	1.4	0.9	12	LA
QD333H	20.1	19.8	21.1	20.3	20.3	-0.50	1.8	0.6	19.4	-1.66	1.5	0.8	12	LZ
QPLG96	21.0	22.7	22.0	21.4	21.8	1.08	1.8	0.7	21.1	0.63	1.5	0.9	12	LZ
R74XP8	22.3 *	21.8	22.0	20.9	21.8	1.07	1.4	0.6	21.6	1.33	1.4	0.6	12	LH
RFP2W7	19.3 L	No DATA	No DATA	No DATA	19.3	-1.57	0.4	0.0	18.9	-2.34 *	0.8	0.5	3	LH
U4BQGF_AL	20.0	19.9	20.5	20.1	20.1	-0.70	1.5	0.3	20.2	-0.53	1.6	0.6	10	AL
UTPLAF	19.8	20.5	No DATA	No DATA	20.1	-0.66	1.2	0.5	19.8	-1.14	1.7	0.5	10	LW
UWC23W_AL	25.4 X	25.1 X	25.5 X	25.1 X	25.2	4.82 X	1.9	0.2	25.6	6.68 X	1.8	0.7	12	AL
UXHJY7	20.3	20.6	20.2	20.8	20.5	-0.31	1.3	0.3	20.9	0.41	1.4	0.7	12	LA
VKT7XG	23.7 X	23.4 *	23.8 *	22.0	23.2	2.66 *	1.4	0.8	22.2	2.07 *	1.4	1.3	8	LH
VVBK46	20.3	20.8	22.0	18.2 *	20.3	-0.46	1.6	1.6 H	20.7	0.08	1.7	1.0	12	XX
WGNX9W_AI	21.0	20.9	21.3	21.1	21.1	0.32	1.5	0.2	21.5	1.21	1.3	0.6	12	AL
XLXBQV	20.4	20.6	20.3	20.7	20.5	-0.26	1.3	0.2	20.4	-0.30	1.4	0.3	12	XX
YAZUCE	20.5 L	21.0	20.5 L	20.5	20.6	-0.14	1.2	0.3	20.8	0.21	1.3	0.6	12	LA
YVFEBZ	20.6 L	20.5 L	20.7	20.6 L	20.6	-0.18	0.6	0.1 L	19.9	-1.04	0.5	0.8	8	LZ
ZKCJQA	20.4	19.7	19.8	20.9	20.2	-0.60	1.3	0.5	20.5	-0.18	1.4	0.5	12	LU
ZT7NLW_AL	21.2	20.8	21.8	21.2	21.3	0.53	1.4	0.4	21.8	1.52	1.6	0.6	12	AL
Consensus (All Labs) Results														
Wk Mean	20.65	20.83	20.86	20.72	Month Mean	20.76		Grand Mean	20.64					
Avg SDr	1.53	1.49	1.46	1.49	Avg SD	1.48		Avg SD	1.59					
SD btwn Labs	0.85	1.04	1.20	0.98	SD btwn Labs	0.93		SD btwn Labs	0.75					
Labs Inclcd	48	50	49	46	SD btwn Wks	0.60		SD btwn Wks	0.82					
Labs Exclcd	7	4	3	3	Labs Inclcd	51		Labs Inclcd	52					
Labs not Rcvd	0	1	3	6										



Containerboard Interlaboratory Testing Program
Analysis 225
STFI, 31 lb Linerboard - 31K1
TAPPI Official Test Method T826

Report #681
June 2026

Key to Instrument Codes Reported by Participants

AK	L & W Autoline 300	AL	L & W Autoline 400
BK	Buchel Strip Compression Tester BK-155	ID	IDM Compression Tester
LA	L&W Autoline (223 Enrollment)	LH	L&W 282
LU	L&W 52 without moisture correction (was 53)	LW	L&W 53 with moisture correction (was 53M)
LY	L&W 152 (was 52M)	LZ	L&W (model not specified)
TT	TMI Short Span Compression, 17-34 (MB K455)	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
Analysis 228
Roughness - Stylus Method, 42 lb Linerboard - 42N1
 TAPPI Official Test Method T575

Report #681
June 2026

WebCode	Monthly Results			Cumulative Results				
	Mean	CPV	SD	Mean	CPV	SD Months	Months	Inst
76H6T3_AL	117.6	-2.21 *	8.64	122.4	-2.04 *	5.84	4	AL
77DMU4	134.1	-1.17	15.14	136.3	-1.18	5.79	4	LS
77DMU4_AL	164.7	0.75	19.67	165.2	0.62	10.35	3	AL
7ZPZ2K_AL	181.6	1.82	17.66	173.5	1.13	6.45	4	AL
86293N	164.2	0.72	23.10	171.7	1.02	5.23	4	LA
8HLM7N	162.6	0.62	16.82	162.5	0.44	4.94	4	LS
8TMBVZ	155.8	0.20	24.51	142.6	-0.79	11.49	3	EV
9MWXWW	164.8	0.76	16.03	174.0	1.16	15.81	4	EV
AWGQLY	180.1	1.72	20.52	172.0	1.04	9.67	4	LS
BMKBAZ	136.4	-1.02	12.47	134.1	-1.32	13.24	4	LA
DNAJ8T	154.4	0.11	21.16	163.7	0.52	14.42	4	EV
ETKWPR_AL	124.9	-1.75	19.87	126.2	-1.81	3.84	4	AL
F32ZAW	135.4	-1.09	15.60	172.4	1.06	25.17	4	LA
LBCA4J_AL	139.7	-0.81	21.09	136.4	-1.18	4.67	4	AL
M8XW2B	152.5	-0.01	25.54	158.9	0.22	4.88	4	EV
MFLMLG	203.6	3.20 X	23.20	157.5	0.13	32.65 H	4	LS
MZDUU9	158.2	0.35	18.77	162.6	0.45	6.58	4	EV
NCHC3M	135.8	-1.06	19.68	135.9	-1.20	4.24	4	XX
PXWJU7	150.2	-0.16	18.08	158.4	0.19	10.14	4	LA
Q9DMEB	164.3	0.73	11.73	163.1	0.49	4.24	4	XX
Q9DMEB_AL	159.4	0.42	11.81	156.5	0.07	10.49	4	AL
QD333H	168.2	0.98	14.35	166.2	0.67	7.62	4	EV
QPLG96	150.0	-0.17	12.88	159.1	0.23	14.38	4	LA
RFP2W7	170.8	1.14	18.54	178.1	1.41	26.31	4	EV
UWC23W_AL	93.0	-3.75 X	12.41	100.5	-3.40 X	11.63	4	AL
UXHJY7	155.9	0.20	6.68 L	172.0	1.04	12.34	4	LA
WGNX9W_AL	153.4	0.04	18.88	147.4	-0.49	18.85	4	AL
WZK4ZC	135.8	-1.06	19.68	135.8	-1.21	0.00	1	EV
ZT7NLW_AL	152.1	-0.04	23.01	144.4	-0.68	6.90	4	AL

Consensus (All Labs) Results

Month Mean	152.70	Grand Mean	155.31
Avg SD	18.07	Avg SD Months	13.18
SD btwn Labs	15.90	SD btwn Labs	16.11
Labs Incl	27	Labs Incl	28

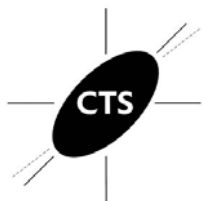


Containerboard Interlaboratory Testing Program
Analysis 228
Roughness - Stylus Method, 42 lb Linerboard - 42N1
TAPPI Official Test Method T575

Report #681
June 2026

Key to Instrument Codes Reported by Participants

AL	L & W Autoline 400	EV	Emveco Microgag Model 210-R
LA	L&W Autoline (228 Enrollment)	LS	L&W 263
XX	Instrument make/model not specified by lab		



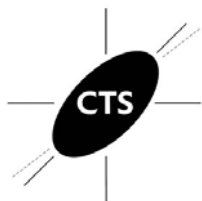
Containerboard Interlaboratory Testing Program
 Analysis 229
Roughness - Sheffield Method, 42 lb Linerboard - 42N1
 TAPPI Official Test Method T538

Report #681
June 2026

WebCode	Monthly Results			Cumulative Results					
	Mean	CPV	SD	Mean	CPV	SD Months	Months	Inst	
6EA474_AL	381.3	0.67	7.47	380.1	0.34	1.99	L	4	XX
77DMU4_AL	405.2	2.22 *	10.72	407.1	1.83	2.00	L	3	AL
7ZPZ2K_AL	366.7	-0.28	13.23	377.7	0.21	10.02		4	AL
8HLM7N	360.6	-0.67	17.80	364.7	-0.51	3.21		4	XX
A4T63U	383.0	0.78	5.23	383.0	0.50	0.79	L	4	PP
BAYYXP	347.7	-1.51	9.65	345.2	-1.57	2.28	L	4	TS
F7NE3D	373.6	0.17	7.89	372.4	-0.08	1.77		2	XX
JARJ4N_AL	375.1	0.27	10.87	371.9	-0.11	2.40	L	4	AL
JBNXQF_AL	364.4	-0.43	9.49	396.5	1.24	21.42		4	AK
LBCA4J_AL	372.2	0.08	6.00	343.4	-1.67	48.76	H	4	AL
MZDUU9	379.0	0.52	12.85	382.4	0.47	5.09		4	XX
Q9DMEB_AL	378.4	0.48	2.59	379.0	0.28	1.54	L	4	AL
R74XP8	451.3	5.20 X	0.68	391.4	0.96	40.65	H	4	PP
U4BQGF_AL	377.7	0.43	7.76	381.2	0.40	5.62		4	AL
VJWQN6	358.1	-0.83	5.28	358.1	-0.87	0.00		1	TS
ZT7NLW_AL	341.8	-1.89 *	7.90	348.1	-1.42	5.16		4	AL
Consensus (All Labs) Results									
Month Mean			370.99	Grand Mean			373.87		
Avg SD			9.70	Avg SD Months			17.72		
SD btwn Labs			15.45	SD btwn Labs			18.20		
Labs Incl			15	Labs Incl			16		

Key to Instrument Codes Reported by Participants

AK	L & W Autoline 300	AL	L & W Autoline 400
PP	Technidyne Profile/Plus	TS	TMI Monitor/Smoothness
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program

Analysis 231

Internal Bond, 42 lb Linerboard - 42N1

TAPPI Official Test Method T569

Report #681

June 2026

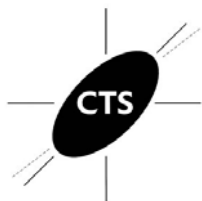
WebCode	Monthly Results			Cumulative Results					Inst
	Mean	CPV	SD	Mean	CPV	SD Months	Months		
3QCHE6	192.0	4.31 X	9.67	127.4	0.06	43.22 H	4	TM	
6EA474	146.4	1.30	3.29	144.8	1.31	4.02	4	HY	
77DMU4	118.3	-0.54	4.43	107.6	-1.36	10.30	4	TM	
7AZ3MK	126.2	-0.03	3.03	129.6	0.22	2.71	4	HY	
7ZP2K	101.6	-1.65	7.09	99.5	-1.94 *	1.67 L	4	TM	
8TMBVZ	118.2	-0.55	13.33	103.7	-1.64	14.03	3	TM	
9MWXWW	134.5	0.52	4.99	141.1	1.05	7.38	4	HZ	
A4T63U	142.0	1.01	3.57	136.8	0.74	3.53	4	HY	
AQ8Q2F	108.1	-1.22	6.08	102.0	-1.76	5.42	3	TM	
AWGQLY	136.6	0.66	4.01	135.4	0.64	2.48	4	HY	
DNAJ8T	113.4	-0.87	11.04	114.7	-0.85	8.06	4	TM	
E4HW3W	122.0	-0.30	2.74	124.8	-0.13	3.01	4	HZ	
ETKWPR	162.2	2.35 *	12.24	150.9	1.75	34.27 H	4	TM	
JARJ4N	132.6	0.40	9.84	133.1	0.47	4.13	4	LZ	
K2WYDF	139.4	0.84	7.64	141.4	1.07	1.77 L	4	HY	
M8XW2B	131.4	0.32	5.41	133.0	0.46	7.91	4	TM	
Q9DMEB	135.6	0.59	4.16	130.9	0.31	5.04	4	TM	
QCTXRE	118.2	-0.55	11.56	123.2	-0.24	4.87	4	HZ	
U4BQGF	128.7	0.14	4.15	133.8	0.53	4.32	4	TM	
UWC23W	103.0	-1.55	1.58 L	113.5	-0.93	7.01	4	TM	
VKT7XG	128.6	0.13	7.77	130.6	0.29	2.11 L	3	XX	
YAZUCE	133.6	0.46	5.77	128.7	0.15	4.18	4	TM	
ZT7NLW	104.4	-1.46	5.03	123.6	-0.21	12.88	4	TM	

Consensus (All Labs) Results

Month Mean	126.59	Grand Mean	126.52
Avg SD	7.11	Avg SD Months	13.08
SD btwn Labs	15.18	SD btwn Labs	13.95
Labs Incl	22	Labs Incl	23

Consensus By Method

Test Method	Group Mean	SD btwn Group	Difference from Grand Mean	Labs Included
Scott Bond Type	124.84	17.20	1.75	16
Modified Scott Bond Mechanics	134.43	6.84	7.84	3



Containerboard Interlaboratory Testing Program

Analysis 231

Internal Bond, 42 lb Linerboard - 42N1

TAPPI Official Test Method T569

Report #681

June 2026

Key to Instrument Codes Reported by Participants

HY	Huygen Digitized Scott Internal Bond Tester	HZ	Huygen Internal Bond Tester with AccuPress
LZ	L&W (model not specified)	TM	TMI Monitor/Internal Bond Tester
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
Analysis 234
COF Inclined Plane (Slide Angle), 42 lb Linerboard - 42N
 TAPPI Official Test Method T815

Report #681
June 2026

WebCode	Monthly Results			Cumulative Results			
	Mean	CPV	SD	Mean	CPV	SD Months	Months
3GQD76	23.4	-0.67	2.41	23.9	-0.72	3.08	4
64U74K	22.6	-0.89	1.52	23.6	-0.84	1.25	3
6EA474	26.8	0.27	3.63	27.6	0.74	0.85	4
76H6T3	27.8	0.55	3.49	26.3	0.21	3.47	4
77DMU4	28.8	0.82	2.39	26.5	0.31	1.72	4
7AZ3MK	22.0	-1.06	1.58	23.6	-0.84	8.14	H 4
7ZPZ2K	21.1	-1.31	3.58	23.7	-0.79	2.09	4
86293N	25.2	-0.17	1.30	23.7	-0.80	1.15	4
8HLM7N	30.0	1.16	1.18	27.3	0.62	3.27	4
8TMBVZ	24.4	-0.40	2.97	24.7	-0.39	0.76	3
9MWXWW	24.8	-0.29	2.59	26.4	0.25	2.22	4
A4T63U	27.5	0.47	3.80	26.4	0.26	1.33	4
AWGQLY	27.2	0.38	1.64	27.6	0.72	0.79	4
BLPR8X	28.6	0.77	2.97	25.9	0.06	3.02	4
DNAJ8T	34.0	2.26 *	2.92	29.8	1.59	3.50	4
ETKWPR	28.7	0.80	3.21	28.3	1.03	2.28	4
JARJ4N	20.0	-1.61	1.70	21.1	-1.82	1.60	4
K2WYDF	24.6	-0.34	1.14	25.1	-0.26	1.18	4
LBCA4J	26.6	0.22	4.51	26.0	0.13	1.24	4
M8XW2B	28.0	0.61	4.08	28.4	1.04	1.34	4
MFLMLG	18.2	-2.11 *	1.79	19.5	-2.46 *	1.32	4
NCHC3M	26.8	0.27	4.21	27.1	0.55	1.74	4
Q9DMEB	24.8	-0.29	0.84	25.0	-0.28	1.05	4
QD333H	30.8	1.39	2.02	30.1	1.73	1.25	4
QPLG96	19.2	-1.84	4.05	21.4	-1.70	1.74	4
R74XP8	26.6	0.21	1.95	25.2	-0.20	1.17	4
UWC23W	27.2	0.38	4.34	27.5	0.68	2.12	4
VKT7XG	23.8	-0.56	1.92	25.1	-0.24	1.92	4
ZT7NLW	29.4	0.99	1.95	29.3	1.42	1.16	4
Consensus (All Labs) Results							
Month Mean	25.83			Grand Mean	25.72		
Avg SD	2.82			Avg SD Months	2.44		
SD btwn Labs	3.61			SD btwn Labs	2.53		
Labs Incl	29			Labs Incl	29		



Containerboard Interlaboratory Testing Program
Analysis 234
COF Inclined Plane (Slide Angle), 42 lb Linerboard - 42N
TAPPI Official Test Method T815

Report #681
June 2026

Key to Instrument Codes Reported by Participants

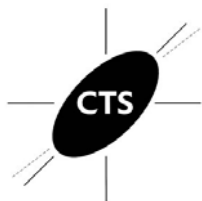
ZZ Instruments No Longer Tracked



Containerboard Interlaboratory Testing Program
 Analysis 237
Air Resistance, 42 lb Linerboard - 42N1
 TAPPI Official Test Method T460

Report #681
June 2026

WebCode	Monthly Results				Cumulative Results				Inst
	Mean	CPV	SD		Mean	CPV	SD Months	Months	
3GQD76_AL	40.9	-1.39	10.63	H	44.0	0.69	2.22	4	AL
64U74K_AL	40.9	-1.42	1.90		50.1	5.81 X	17.16 H	3	XX
6EA474	44.0	0.79	1.75		43.0	-0.17	1.69	4	TP
6EA474_AL	42.9	-0.02	2.24		42.5	-0.60	0.62	4	XX
76H6T3_AL	41.5	-1.02	2.60		40.0	-2.62 *	1.17	4	AL
77DMU4_AL	42.1	-0.54	2.36		41.7	-1.23	0.73	3	AL
7ZPZ2K_AL	43.8	0.64	3.47		43.5	0.30	1.42	4	AL
86293N	40.8	-1.46	1.52		42.8	-0.31	1.83	4	LA
8HLM7N	44.2	0.89	2.93		44.8	1.39	0.83	4	GA
8TMBVZ_AL	42.9	0.01	1.56		43.2	0.05	0.94	4	AL
9MWXWW	44.5	1.11	1.49		44.2	0.84	0.70	4	LP
A4T63U	45.9	2.12 *	1.17	L	44.9	1.46	0.96	4	TP
AQ8Q2F	43.8	0.60	2.50		43.8	0.56	2.04	3	GA
AWGQLY	43.8	0.60	2.69		44.1	0.75	0.49	4	LP
BLPR8X	43.0	0.04	1.66		43.0	-0.13	0.84	4	LP
BMKBAZ	43.9	0.72	1.18	L	42.2	-0.78	1.48	4	LA
DNAJ8T_AL	43.1	0.11	1.05	L	43.0	-0.12	0.26	4	AL
E4HW3W	42.9	0.02	2.79		43.8	0.54	1.00	4	LP
ETKWPR_AL	42.7	-0.16	1.73		42.6	-0.45	1.72	4	AL
F32ZAW	45.7	1.93 *	1.68		45.1	1.65	1.38	4	LA
J7R99N	43.7	0.56	2.57		43.1	-0.05	0.42	4	LP
JARJ4N_AL	44.2	0.90	1.34		43.5	0.31	0.79	4	AL
JBNXQF_AL	43.9	0.67	1.87		43.7	0.47	0.48	3	AK
LBCA4J_AL	40.0	-2.07 *	1.43		40.3	-2.42 *	0.85	4	AL
M8XW2B	41.0	-1.32	1.97		42.0	-1.01	1.17	4	LP
MC8D9D	43.0	0.06	3.56		43.7	0.40	1.19	4	GG
MFLMLG	42.3	-0.45	3.21		41.7	-1.27	0.90	4	TD
NCHC3M	39.4	-2.49 *	1.98		39.2	-3.33 X	1.44	4	LP
PMYHEG	43.7	0.55	2.12		43.6	0.32	1.38	4	LP
PXWJU7	43.3	0.28	1.98		43.7	0.47	1.21	4	LA
Q9DMEB	44.1	0.80	1.92		43.8	0.52	1.34	4	LP
Q9DMEB_AL	42.9	0.02	2.61		43.8	0.49	1.55	4	AL
QPLG96	42.0	-0.62	1.93		43.6	0.34	1.34	4	LA
R74XP8	43.0	0.09	3.55		43.4	0.17	2.03	4	TP
U4BQGF_AL	43.6	0.46	1.66		41.3	-1.59	2.24	4	AL
UWC23W_AL	47.3	3.07 X	2.31		45.9	2.25 *	2.25	4	AL
UXHJY7	41.1	-1.30	3.27		42.5	-0.60	1.03	4	LA
VKT7XG	42.7	-0.13	3.11		42.9	-0.26	1.53	4	LP
WGNX9W_AL	42.5	-0.32	2.23		43.0	-0.12	0.51	4	AL



Containerboard Interlaboratory Testing Program

Analysis 237

Air Resistance, 42 lb Linerboard - 42N1

TAPPI Official Test Method T460

Report #681

June 2026

WebCode	Monthly Results			Cumulative Results				
	Mean	CPV	SD	Mean	CPV	SD Months	Months	Inst
ZT7NLW_AL	44.0	0.78	2.02	42.9	-0.26	0.89	4	AL

Consensus (All Labs) Results			
Month Mean	42.91	Grand Mean	43.17
Avg SD	2.82	Avg SD Months	1.31
SD btwn Labs	1.43	SD btwn Labs	1.19
Labs Incl	39	Labs Incl	38

Key to Instrument Codes Reported by Participants

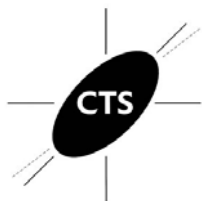
AK	L & W Autoline 300	AL	L & W Autoline 400
GA	Gurley Precision #4340 Automatic Densometer	GG	Gurley Precision #4320 Densometer
LA	L&W Autoline (237 Enrollment)	LP	L&W Air Permeance Tester SE 166
TD	TMI Gurley Densometer	TP	Technidyne Profile/ plus Roughness & Porosity
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program
Analysis 240
Flat Crush Strength (CMT), 26 lb Corrugating Medium - CM61
 TAPPI Official Test Method T809

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results					Inst
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	
6EA474	51.5	51.1	48.9	50.8	50.6	-0.94	2.3	1.2	45.8	-2.57 *	1.9	9.0 H	16	LD
76H6T3	51.6	51.0	54.6	50.7	52.0	-0.49	3.2	1.8	52.4	-0.33	2.9	1.3	16	LZ
7UYQRL	56.5 L	56.5 L	56.5 L	56.5 L	56.5	0.97	0.5	0.0 L	56.5	1.07	0.5	0.1 L	16	LD
7Z8RB4	55.1	55.1	53.7	52.9	54.2	0.23	3.4	1.1	54.6	0.41	3.3	0.8	16	XX
86293N	50.6	52.0	49.2	51.6	50.9	-0.85	3.6	1.3	50.5	-0.99	4.2	1.6	16	MB
8TMBVZ	54.3	54.9	54.6	55.6	54.9	0.45	1.7	0.6	54.5	0.36	2.5	1.0	14	LC
8WH24W	59.2 L	60.7 *L	63.0 *L	62.4 XL	61.3	2.55 *	1.1	1.7	59.7	2.12 *	1.1	2.1	16	XX
9MWXWW	55.7	54.1	52.9	53.6 L	54.1	0.19	2.7	1.2	54.1	0.22	2.9	1.4	16	LZ
A4T63U	55.8	55.2	57.5	56.4	56.2	0.89	2.6	1.0	53.5	0.04	2.7	1.9	16	LC
AWGQLY	No DATA	No DATA	No DATA	49.9	49.9	-1.15	1.6	0.0	51.2	-0.75	1.6	0.9	4	LD
AXM9JU	58.8	60.6 *	57.7	58.0	58.8	1.73	3.4	1.3	57.5	1.38	3.1	1.6	16	TB
BLPR8X	56.0	55.1	54.0	57.5	55.6	0.70	2.9	1.5	55.0	0.56	2.9	1.4	16	LD
CEQPHR	53.5 L	52.4	52.1	52.4	52.6	-0.29	1.3	0.6	52.2	-0.39	2.2	1.3	16	LD
F32ZAW	52.4	51.6	59.3	54.7	54.5	0.33	3.4	3.5 H	58.0	1.57	3.8	4.3	16	TU
F7NE3D	51.4	50.8	51.0	51.7	51.2	-0.73	2.8	0.4	50.3	-1.05	2.7	1.3	8	LD
FPGK7X	52.7	53.0	54.2	54.0	53.5	0.00	2.6	0.7	53.8	0.13	2.4	1.0	15	LZ
HMMBCM	57.2	55.5	56.3	55.4	56.1	0.85	2.4	0.8	56.3	0.99	2.6	0.9	16	LD
J7R99N	51.7	52.6	52.1	54.1	52.6	-0.27	1.7	1.0	51.7	-0.58	1.7	1.1	16	LD
JARJ4N	50.4	49.2	49.8	48.2	49.4	-1.32	2.2	0.9	51.0	-0.80	2.4	1.6	16	LD
JDVFPD	55.6	54.5	53.5	52.5	54.0	0.19	2.7	1.3	53.7	0.12	2.9	1.4	12	LD
K2WYDF	54.2	52.2	52.6 L	51.6	52.7	-0.27	2.5	1.1	52.2	-0.40	2.2	2.2	16	LD
K4YYDD	51.6	50.5	46.0 *	48.4	49.1	-1.43	2.0	2.5	49.6	-1.30	2.3	1.4	16	TX
L9AA78	48.5	48.6	48.7	49.2 L	48.8	-1.53	1.6	0.3	49.3	-1.38	1.8	0.5 L	16	LD
M2KBQH	57.7	56.7	52.3	54.2	55.2	0.56	2.4	2.5	55.4	0.68	2.8	1.6	16	LD
MF6QV3	51.3	50.6	50.9	49.1	50.4	-0.99	2.7	1.0	51.4	-0.67	2.6	1.4	16	LD
MZDUU9	51.9	52.3	54.1	50.1	52.1	-0.45	1.9	1.7	52.6	-0.26	2.4	1.3	16	TX
NCHC3M	56.8	55.3	54.1	54.3	55.1	0.53	2.5	1.2	55.3	0.64	2.6	2.1	14	LD
P4NQCE	44.5 X	46.2 *	45.2 *	47.2 *	45.7	-2.51 *	2.4	1.2	50.6	-0.94	2.1	3.3	16	TU
PMYHEG	50.9	52.9	51.6	52.0	51.9	-0.53	3.0	0.8	52.9	-0.18	2.8	1.1	16	LD
Q9DMEB	53.4	55.3	54.9	55.1	54.7	0.38	3.4	0.9	53.9	0.18	3.5	1.5	16	LD
QCTXRE	52.1	52.5	50.2	50.5	51.3	-0.71	2.9	1.1	51.7	-0.57	2.2	1.3	16	LD
QD333H	54.1	53.0	52.0	53.3	53.1	-0.13	3.3	0.9	52.3	-0.38	3.2	1.3	16	EN
QPLG96	52.5	52.8	53.5	54.3	53.3	-0.07	2.4	0.8	58.5	1.74	3.4	6.8 H	16	LD
R74XP8	58.9	57.1	56.4	56.6	57.2	1.22	2.8	1.2	56.9	1.20	3.5	2.0	16	LD
RXUBZD	51.0	51.8	50.6	52.6	51.5	-0.64	2.4	0.9	48.4	-1.71	2.1	3.8	16	LD



Containerboard Interlaboratory Testing Program
Analysis 240
Flat Crush Strength (CMT), 26 lb Corrugating Medium - CM61
 TAPPI Official Test Method T809

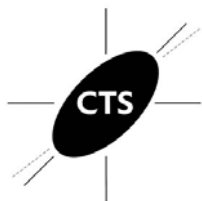
Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results								
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst			
UWC23W	55.4	56.2	57.6	54.6	55.9	0.79	3.5	1.3	53.8	0.13	3.1	10.4	H 15	LZ			
VKT7XG	49.9	49.6	49.3	50.9	49.9	-1.16	1.6	0.7	49.2	-1.43	2.0	1.3	16	LZ			
W7MAGZ	52.4	53.8	52.3	55.0	53.4	-0.03	3.6	1.3	53.3	-0.02	2.9	1.2	16	TX			
WD6J3B	58.2	60.2	*	58.7	58.9	1.76	2.5	0.9	57.4	1.35	2.9	1.9	16	LC			
YAZUCE	53.8	53.4	60.0	57.6	56.2	0.88	2.8	3.2	H	56.1	0.91	3.1	2.0	16	LC		
YVFEBZ	56.7	56.6	L	57.7	L	58.0	L	57.3	1.23	1.1	0.7	56.4	1.01	1.0	1.1	8	XX
ZKCJQA	56.9	56.7	55.8	52.8	H	55.5	0.67	6.1	1.9	54.0	0.20	4.7	1.7	16	LD		
ZT7NLW	51.7	51.1	52.5	51.1	51.6	-0.61	2.8	0.7	52.5	-0.32	2.4	1.8	16	LD			

					Consensus (All Labs) Results			
Wk Mean	53.89	53.60	53.52	53.17	Month Mean	53.48	Grand Mean	53.40
Avg SDr	2.71	2.55	2.60	3.11	Avg SD	2.72	Avg SD	2.72
SD btwn Labs	2.79	3.11	3.71	2.92	SD btwn Labs	3.08	SD btwn Labs	2.95
Labs Incl	41	42	42	42	SD btwn Wks	1.38	SD btwn Wks	2.88
Labs Excl	1	0	0	1	Labs Incl	43	Labs Incl	43
Labs not Rcvd	1	1	1	0				

Key to Instrument Codes Reported by Participants

EN	Emerson 2200 Series	LC	L&W Crush Tester 48
LD	L&W Crush Tester 248	LZ	L&W Crush Tester (model not specified)
MB	Messmer Buchel K440	TB	TMI Monitor/Compression Tester, 17-70
TU	TMI Universal Crush Tester (TMI K440)	TX	TMI Crush Tester (model not specified)
XX	Instrument make/model not specified by lab		



Containerboard Interlaboratory Testing Program

Analysis 250

Report #681

June 2026

Fluted Edge Crush Strength (CFC), 26 lb Corrugating Medium - CM61

TAPPI Official Test Method T843

WebCode	Weekly Means					Monthly Results				Cumulative Results									
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst					
337Y6Q	55.1	51.1	52.8	H	53.7	53.2	-1.20	3.0	1.7	54.9	-0.74	2.5	1.8	12	LD				
6EA474	61.3	60.5	61.5		60.4	60.9	0.91	1.6	0.6	61.1	0.68	1.9	1.0	16	LD				
76H6T3	53.3	54.4	52.2		55.0	53.7	-1.05	2.3	1.2	53.8	-0.99	3.4	1.3	16	LZ				
7Z8RB4	59.1	60.5	59.6		58.7	59.5	0.52	2.0	0.8	59.5	0.32	2.0	0.7	16	XX				
8TMBVZ	61.7	60.6	No DATA		60.0	60.8	0.87	2.3	0.9	60.8	0.61	2.3	1.5	13	LC				
8WH24W	70.5	XL	73.0	XL	69.4	*L	70.8	XL	70.9	3.64	X	0.7	1.5	69.2	2.54	* 0.9	2.4	16	XX
A4T63U	61.5	61.3	61.6		60.4	61.2	0.99	2.0	0.6	59.9	0.40	1.8	1.0	16	LC				
AVKB92	50.7	50.0	*	49.5	*L	49.2	*	49.8	-2.11	*	1.2	0.7	51.7	-1.47	1.9	1.6	16	LD	
CEQPHR	59.6	60.1	L	60.7	60.1	60.1	0.69	1.4	0.4	58.9	0.18	1.9	1.3	12	XX				
FPGK7X	53.4	58.5	57.5	57.3	56.7	-0.25	2.1	2.2	H	57.9	-0.06	2.0	1.7	15	LZ				
FR4ZYD	58.6	58.4	58.8	55.9	57.9	0.09	1.9	1.3	58.5	0.08	1.8	1.0	16	LC					
J7R99N	62.7	63.1	L	61.8	62.2	62.4	1.32	1.1	0.6	62.5	1.01	1.3	0.6	16	LD				
JARJ4N	57.8	57.7	56.0	57.2	57.1	-0.12	1.9	0.8	58.0	-0.03	1.9	1.1	16	LD					
K2WYDF	57.6	56.8	57.6	60.0	58.0	0.11	2.7	1.4	57.7	-0.10	2.6	1.0	16	LD					
M2KBQH	51.6	H	54.7	H	54.9	H	53.7	53.7	-1.06	4.4	1.5	52.9	-1.21	4.6	1.2	16	LD		
NCHC3M	60.2	60.9	59.1	59.7	60.0	0.65	1.9	0.8	59.9	0.40	2.6	1.4	14	LD					
PMYHEG	57.1	59.0	57.6	57.8	57.9	0.08	1.7	0.8	58.5	0.09	1.7	0.9	16	LD					
Q9DMEB	48.3	*	48.9	*H	50.5	51.1	49.7	-2.16	*	3.2	1.3	49.0	-2.09	*	3.1	1.0	16	LD	
QPLG96	58.1	58.9	60.3	60.2	59.4	0.48	2.1	1.0	62.1	0.91	3.6	5.6	H	16	LD				
R74XP8	58.3	54.9	55.4	54.9	H	55.9	-0.47	3.4	1.7	51.9	-1.42	3.8	2.9	16	LD				
VKT7XG	63.2	63.1	62.4	63.2	63.0	1.47	1.9	0.4	62.1	0.92	1.9	1.2	16	LD					
YVFEBZ	58.0	L	58.2	58.1	L	58.2	58.1	0.14	1.0	0.1	L	57.8	-0.08	1.1	0.7	8	XX		
ZT7NLW	58.7	58.6	57.5	57.3	58.0	0.12	1.7	0.7	58.3	0.05	2.6	2.0	16	LD					

Consensus (All Labs) Results									
Wk Mean	57.55	57.73	57.95	57.54	Month Mean	57.59	Grand Mean	58.13	
Avg SDr	2.12	2.22	2.26	2.42	Avg SD	2.27	Avg SD	2.48	
SD btwn Labs	3.98	3.93	4.46	3.52	SD btwn Labs	3.67	SD btwn Labs	4.35	
Labs Incl	22	22	22	22	SD btwn Wks	1.09	SD btwn Wks	1.82	
Labs Excl	1	1	0	1	Labs Incl	22	Labs Incl	23	
Labs not Rcvd	0	0	1	0					

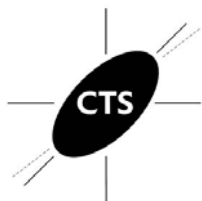
Key to Instrument Codes Reported by Participants

LC L&W Crush Tester 48

LZ L&W Crush Tester (model not specified)

LD L&W Crush Tester 248

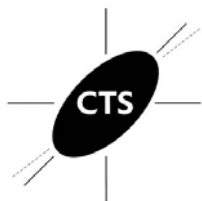
XX Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
Analysis 255
Ring Crush (RCT), 26 lb Corrugating Medium - CM61
 TAPPI Official Test Method T822

Report #681
June 2026

	Weekly Means				Monthly Results				Cumulative Results					
WebCode	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
337Y6Q	35.0	32.8	33.1	33.9	33.7	0.01	1.7	1.0	36.0	1.66	1.8	2.0	12	LD
6EA474	32.4	32.2	31.8	32.3	32.1	-1.00	1.5	0.3	31.2	-1.89	1.5	1.0	16	LD
7UYQRL	36.5 * L	36.5 L	36.5 L	36.5 L	36.5	1.85	0.5	0.0 L	37.3	2.58 * 0.6	0.9	0.9	16	LD
7Z8RB4	33.6	34.3	34.7	33.8	34.1	0.28	2.0	0.5	33.7	-0.01	2.0	0.6	16	XX
86293N	33.3	33.9	34.4	34.4	34.0	0.20	1.9	0.5	34.5	0.56	3.2	1.9	16	MB
8HLM7N	31.6	33.7	34.6	33.3 L	33.3	-0.25	1.2	1.3	33.0	-0.53	1.6	0.9	16	LD
9AQ8UP	26.0 XL	26.1 X	26.5 X	26.9 X	26.4	-4.76 X	0.9	0.4	24.0	-7.12 X	1.4	4.4 H	12	XX
A4T63U	32.6	33.0	32.6	31.9	32.5	-0.75	1.7	0.4	32.4	-1.01	1.9	0.7	16	LC
AXM9JU	32.9	31.3	33.0	33.6	32.7	-0.64	1.8	1.0	33.0	-0.52	1.9	0.8	16	XX
BLPR8X	31.9	33.8	33.3	32.8	32.9	-0.48	2.5	0.8	33.4	-0.24	2.4	1.1	16	LD
CEQPHR	32.0	34.7	32.2	32.7	32.9	-0.50	1.7	1.2	33.0	-0.58	1.8	1.3	16	XX
FFP3RP	32.2	31.6	31.6	31.2	31.6	-1.34	2.1	0.4	31.6	-1.57	1.9	0.4 L	16	TH
HMMBCM	33.6	35.2	35.0	35.5	34.8	0.77	1.8	0.8	35.2	1.03	1.6	0.6	16	LD
J7R99N	33.7	32.7	33.0	33.3	33.2	-0.33	1.0	0.4	32.7	-0.79	1.2	0.6	16	LD
JARJ4N	33.1	32.1	33.1	32.7	32.7	-0.61	2.5	0.5	33.0	-0.54	2.4	0.8	16	LD
JBNXQF	33.9	33.3	32.2	30.7	32.5	-0.75	2.0	1.4	34.1	0.26	1.8	1.6	16	LD
K2WYDF	33.3	34.8	33.8	35.1	34.2	0.38	2.0	0.8	34.2	0.31	1.8	1.0	16	LD
MF6QV3	33.8	33.4	34.7	34.1 H	34.0	0.22	2.6	0.5	33.6	-0.11	2.3	2.0	16	LD
MZDUU9	25.3 XH	25.1 X	26.0 XH	24.8 X	25.3	-5.50 X	3.1	0.5	26.4	-5.36 X	3.1	1.0	16	MZ
NQ4R7L	36.7 * H	35.1	35.7	35.1 H	35.7	1.31	2.9	0.7	35.7	1.39	2.9	0.7	4	LC
P4NQCE	31.6	32.7	32.6	32.5	32.4	-0.85	1.4	0.5	33.1	-0.45	1.4	0.9	16	TU
PMYHEG	33.5	34.6	32.5	31.0	32.9	-0.50	1.8	1.5	33.6	-0.14	1.8	0.9	16	LD
QCTXRE	33.3	31.0	33.5	33.9	32.9	-0.49	1.8	1.3	32.3	-1.07	1.8	1.2	16	LD
R74XP8	33.1	33.4	32.9	33.6	33.3	-0.27	2.3	0.3	28.9	-3.52 X	2.8	3.1	16	LD
RXUBZD	35.8	33.5	35.0	33.2	34.4	0.46	1.6	1.2	33.7	-0.02	1.6	1.3	16	LD
UWC23W	35.5	36.5	37.3 * 0.6	37.9 * 0.6	36.8	2.03 * 0.6	1.5	1.0	34.6	0.66	1.5	5.9 H	15	LZ
VKT7XG	35.5	36.5	36.9 * 0.6	35.4	36.1	1.57	1.8	0.8	34.9	0.80	1.7	1.2	16	LD
W7MAGZ	34.8	28.5 X	30.0 * 0.6	30.6	31.0	-1.77	1.8	2.7	32.8	-0.71	2.0	3.2	16	LZ
WD6J3B	32.5	32.4	32.9	33.5	32.8	-0.55	1.9	0.5	33.5	-0.16	1.9	1.1	16	XX
YVFEBZ	33.3 L	33.5	46.4 XH	33.7 L	36.8	2.03 * 0.6	12.9	6.5 H	35.2	1.08	9.1	4.5 H	8	MZ



Containerboard Interlaboratory Testing Program
 Analysis 255
Ring Crush (RCT), 26 lb Corrugating Medium - CM61
 TAPPI Official Test Method T822

Report #681
June 2026

Consensus (All Labs) Results								
Wk Mean	33.60	33.65	33.66	33.50	Month Mean	33.67	Grand Mean	33.75
Avg SDr	1.76	1.91	1.89	1.94	Avg SD	3.06	Avg SD	2.58
SD btwn Labs	1.42	1.50	1.70	1.68	SD btwn Labs	1.52	SD btwn Labs	1.37
Labs Incl	28	27	27	28	SD btwn Wks	1.56	SD btwn Wks	1.90
Labs Excl	2	3	3	2	Labs Incl	28	Labs Incl	27
Labs not Rcvd	0	0	0	0				

Key to Instrument Codes Reported by Participants

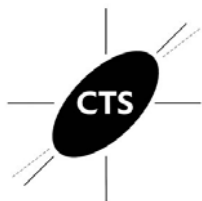
LC	L&W Crush Tester 48	LD	L&W Crush Tester 248
LZ	L&W Crush Tester (model not specified)	MB	Messmer Buchel K440
MZ	Messmer Buchel (model not specified)	TH	TMI Compression Tester, Model 17-76
TU	TMI Universal Crush Tester (TMI K440)	XX	Instrument make/model not specified by lab



Containerboard Interlaboratory Testing Program
Analysis 261
STFI, 26 lb Corrugating Medium - CM61
TAPPI Official Test Method T826

Report #681
June 2026

WebCode	Weekly Means				Monthly Results				Cumulative Results					
	Week 1	Week 2	Week 3	Week 4	Mean	CPV	SD	SD Wks	Mean	CPV	SD	SD Wks	Wks	Inst
337Y6Q	12.0	12.4	12.3	12.3	12.2	1.18	0.8	0.1	12.6	1.66	0.9	0.7	12	LH
77DMU4	12.0	12.0	11.5	11.2	11.7	0.26	0.8	0.4	11.7	0.17	0.8	0.3	12	LA
86293N	12.1	11.0	11.4	11.9	11.6	0.15	0.8	0.5	12.0	0.61	1.3	0.6	16	LA
8HLM7N	11.7	11.0	11.3	11.4	11.3	-0.29	0.7	0.3	11.4	-0.42	0.8	1.0	16	LB
8WH24W	10.8	11.4	11.5	11.3	11.2	-0.47	0.9	0.3	10.6	-1.71	0.9	0.7	16	XX
A4T63U	11.3	11.4	11.2	11.5	11.4	-0.28	0.7	0.1	11.3	-0.50	0.7	0.2	L 16	LU
AWGQLY	No DATA	No DATA	No DATA	12.0	12.0	0.82	0.7	0.0	11.6	-0.01	0.6	0.4	4	LH
BLPR8X	11.0	11.4	11.1	11.4	11.2	-0.47	0.7	0.2	11.2	-0.74	0.7	0.3	16	LH
F32ZAW	12.7	12.1	13.0	*H 11.7	12.4	1.44	0.9	0.6	12.3	1.10	1.0	0.4	16	LA
JARJ4N	11.6	11.6	11.8	11.6 L	11.6	0.19	0.6	0.1	11.4	-0.37	0.7	0.3	14	LA
JBNXQF	12.2	12.1	11.9	11.6	11.9	0.69	0.9	0.3	12.0	0.69	0.9	0.9	16	LH
K2WYDF	10.7	10.5	10.7	10.4 *	10.6	-1.59	0.8	0.1	10.6	-1.68	0.8	0.3	16	LB
K4YYDD	10.7	10.8	10.6	11.5	10.9	-1.01	0.8	0.4	10.9	-1.22	0.8	0.6	16	TT
M2KBQH	11.8	10.7	10.7	H 11.7 L	11.2	-0.53	0.8	0.6	11.4	-0.34	0.7	0.5	16	LA
MF6QV3	10.7	11.1	10.7	H 11.7 H	11.1	-0.77	1.3	0.5	11.4	-0.37	1.0	0.6	16	LH
MZDUU9	11.3	11.2	11.2	10.4 *	11.0	-0.83	0.8	0.4	10.8	-1.39	0.9	0.3	16	TS
N9MH87	12.3	12.0	12.1	11.8	12.0	0.89	0.9	0.2	11.9	0.51	0.9	0.5	16	LU
P4NQCE	10.5	10.8	10.2	9.8 X	10.3	-2.00	* 0.8	0.4	10.8	-1.39	0.9	0.6	16	XX
PXWJU7	11.9	12.0	12.0	12.2	12.0	0.82	1.0	0.1	12.3	1.19	1.2	0.6	16	LA
Q9DMEB	10.9	11.2	11.0	10.9	11.0	-0.87	1.0	0.1	11.6	-0.03	1.6	0.5	12	LB
QCTXRE	11.7	11.8	11.5	11.2	11.6	0.05	0.8	0.3	11.5	-0.24	0.8	0.3	16	XX
QPLG96	12.6	13.2 X	12.1	12.9 X	12.7	1.98	* 0.8	0.5	12.6	1.65	1.5	1.0	16	LB
R74XP8	12.3	12.0	11.7	11.5	11.9	0.57	0.7	0.3	11.8	0.24	0.7	0.5	16	LH
UXHJY7	11.0	10.5	11.2	11.1 L	10.9	-0.95	0.8	0.3	12.4	1.27	2.8	1.4 H	12	LA
VKT7XG	12.6	12.6 *	12.9 *	13.5 X	12.9	2.31	* 0.9	0.4	12.8	1.92	* 0.9	0.5	16	LA
W7MAGZ	12.0	11.0	10.4	10.9	11.1	-0.76	0.7	0.7	11.8	0.38	0.8	0.8	16	XX
XLXBQV	10.8	10.8	10.6	11.2	10.9	-1.08	0.8	0.3	10.8	-1.29	0.8	0.3	16	XX
YAZUCE	11.6 H	11.5	11.6	11.7 H	11.6	0.14	1.0	0.1	11.6	0.03	0.8	0.4	16	LA
YVFEBZ	11.5 L	11.5 L	11.9 L	11.5 L	11.6	0.14	0.3	0.2	11.6	0.01	0.3	0.1 L	8	XX
ZT7NLW	12.3	11.3	12.2	10.9	11.7	0.26	0.9	0.7	11.8	0.23	0.8	0.5	16	LA



Containerboard Interlaboratory Testing Program

Analysis 261

STFI, 26 lb Corrugating Medium - CM61

TAPPI Official Test Method T826

Report #681

June 2026

Consensus (All Labs) Results								
Wk Mean	11.60	11.42	11.45	11.43	Month Mean	11.52	Grand Mean	11.61
Avg SDr	0.82	0.85	0.83	0.84	Avg SD	0.83	Avg SD	1.03
SD btwn Labs	0.66	0.57	0.70	0.46	SD btwn Labs	0.60	SD btwn Labs	0.62
Labs Incl	29	28	29	27	SD btwn Wks	0.37	SD btwn Wks	0.60
Labs Excl	0	1	0	3	Labs Incl	30	Labs Incl	30
Labs not Rcvd	1	1	1	0				

Key to Instrument Codes Reported by Participants

LA	L&W Autoline	LB	L&W Model 152
LH	L&W 282	LU	L&W 52 without moisture correction (was 53)
TS	TMI Monitor/STFI Compression Tester, 17-33	TT	TMI Short Span Compression, 17-34 (MB K455)
XX	Instrument make/model not specified by lab		

End of Report