# SPECIFICATION FOR CORRUGATED FIBREBOARD CONTAINERS FOR GENERAL PURPOSES

# AMENDMENT NO. 1

September 1997

# 1. Page 6, Subclause 2.6

Delete the existing text entirely and substitute with the following:

**2.6 Fluting (Corrugating) Medium.** A fluting paper intended for use in the manufacture of corrugated fibreboard.

## 2. Page 6, Subclause 2.7

Delete Subclause 2.7 and substitute with the following:

- 2.7 Creasing Lines
- **2.7.1** Crease. An indentation in the board to give the line of fold (against the corrugation).
- **2.7.2 Score.** An impression or crease in corrugated or solid fibreboard, made to position and facilitate folds (vertical with the corrugation).

## 3. Page 6, New Subclauses 2.9 and 2.10

Insert the following new subclauses after the existing Subclause 2.8.

- **2.9** Flute (Paper And Board). The configuration of the undulations in fluted paper or in a corrugated fibreboard.
- **2.10** Flute (Converted Products). The configuration of the undulations in fluted paper.

# 4. Page 6, Subclause 3.1

Delete the existing text entirely and substitute with the following:

- **3.1** Board consisting of one or more sheets of fluted paper (paper after undergoing a process resulting in a pattern of regular and permanent undulations) stuck to a flat sheet of paper or between several sheets. This has the following main classifications:
  - (a) Single-face corrugated fibreboard. Board consisting of one sheet of fluted paper (paper after undergoing a process resulting in a pattern of regular and permanent undulations) stuck to one sheet of facing (a form of liner used as the flat components of corrugated fibreboard).





Figure 1. Single-face corrugated fibreboard

(b) Single-wall corrugated fibreboard (also known as double-faced). Board consisting of one sheet of fluted paper (paper after undergoing a process resulting in a pattern of regular and permanent undulations) interposed between and stuck to two facings (a form of liner used as the flat components of corrugated fibreboard).



Figure 2. Single-wall corrugated fibreboard (also known as double-faced)

(c) Double-wall corrugated fibreboard (also known as double-double faced). Board consisting of two sheets of fluted paper (paper after undergoing a process resulting in a pattern of regular and permanent undulations) interposed between and stuck to three facings (a form of liner used as the flat components of corrugated fibreboard).



Figure 3. Double-wall corrugated fibreboard (also known as double-double faced)

(d) Triple-wall corrugated fibreboard. Board consisting of three sheets of fluted paper (paper after undergoing a process resulting in a pattern of regular and permanent undulations) interposed between and stuck to four facings (a form of liner used as the flat components of corrugated fibreboard).

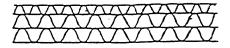


Figure 4. Triple-wall corrugated fibreboard

## 5. Page 7, Table 1

Delete the existing Table 1 and substitute with the following:

Table 1. Details Of Types Of Flute Form

and the state of t	Corrugations per metre	Height of corrugations (mm)			
Flute A	100 to 120	4.5 to 4.7			
Flute B	150 to 170	2.5 to 3.0			
Flute C	125 to 140	3.5 to 3.8			
Flute E	290 to 320	1.2 to 1.5			

## 6. Page 7, Subclause 3.2

- (a) In paragraph 2, line 6, delete 'Chipboard or straw liner C'.
- (b) In paragraph 3, line 2, delete 'grams per' and substitute with 'grammes per'.
- (c) In paragraph 4, *delete* the existing text and *substitute* with the following:

To describe a corrugated fibreboard, each component material is described in turn, starting at the outside of the container and working inwards. The alphabet(s) and number(s) indicate the type of material and the grammage. The flute form is described at the end (see examples).

#### Example:

#### K150/M125/K150 AF

Single-wall corrugated fibreboard, outer liner 150 G/M2 kraft liner, corrugating medium 125 G/M2, inner liner 150 G/M2 Kraft liner, "A" flute corrugation.

# Example:

#### WL200/M125/M125/M125/K150 BCF

Double-wall corrugated fibreboard, outer liner 200 G/M2 white top liner, corrugating medium 125 G/M2, centre liner 125 G/M2 corrugating medium, corrugating medium 125 G/M2, inner liner 150 G/M2 kraft liner, "B" and "C" flute corrugations.

## 7. Page 8, Clause 6

In paragraph 1, between lines 5 and 6, insert the following:

width (W) assumes the same definition as breadth;

# 8. Page 9, Table 2

Delete the existing Table 2 and substitute with the following table:

Table 2. General Guidance On Corrugated Fibreboard Container

Maximum weight of box and contents		Maximum outside dimensions (length, width and depth added) (see Note 3)		Minimum combined weight of facings, including centre facing(s) of double-wall and triple-wall board (see Note 2)  Minimum combined weight of plies, solid fibreboard, excluding adhesives		Minimum bursting test, single-wall, double-wall or solid fibreboard (see Note 1(a))  Minimum puncture test, triple wall board (see Note 1(b))		*Minimum edge crush test (ECT) (see Note 1(c))			
lb	kg	in	mm	lb/msf	g/m²	psi	kg/cm²	lb/in	kg/cm		
SINGLE-WALL CORRUGATED FIBREBOARD BOXES											
20	9	40	1016	52	254	125	8.8	23	4.1		
35	16	50	1270	66	322	150	10.5	26	4.6		
50	23	60	1524	75	366	175	12.3	29	5.2		
65	29	75	1905	84	410	200	14.1	32	5.7		
80	36	85	2159	111	542	250	17.6	40	7.1		
95	43	95	2413	138	674	275	19.3	44	7.9		
120	54	105	2667	180	879	350	24.6	55	9.8		
	DOUBLE-WALL CORRUGATED FIBREBOARD BOXES										
80	36	85	2159	92	449	200	14.1	42	7.5		
100	45	95	2413	110	537	275	19.3	48	8.6		
120	54	105	2667	126	<b>∕615</b>	350	24.6	51	9.1		
140	64	110	2794	180	879	400	28.1	61	10.9		
160	73	115	2921	222	1084	500	35.2	71	12.7		
180	82	120	3048	270	1318	600	42.2	82	14.7		
TRIPLE-WALL CORRUGATED FIBREBOARD BOXES											
240	109	110	2794	168	820	700	49.2	67	12.0		
260	118	115	2921	222	1084	900	63.3	80	14.3		
280	127	120	3048	264	1289	1100	77.3	90	16.1		
300	136	125	3175	360	1758	1300	91.4	112	20.0		
			,	SOLID FIBE	REBOARD B	OXES					
20	9	40	1016	114	557	125	8.8	**************************************			
40	18	60	1524	149	727	175	12.3	-			
65	29	75	1905	190	928	200	14.1	-			
90	41	90	2286	237	1157	275	19.3	-			
120	54	100	2540	283	1382	350	24.6	**			

<sup>\*</sup>Until further notice

# NOTE 1. Test Procedures:

# (a) Burst Test:

(1) Tests to determine compliance with the bursting test requirements must be conducted in accordance with Technical Association of Pulp and Paper Industry (TAPPI), Official Test Method T-810. (2) A minimum of six-bursts must be made, three from each side of the board, and only one burst test will be permitted to fall below the specified minimum value. Board failing to pass the foregoing test will be accepted if in a retest consisting of 24 bursts, 12 from each side of the board, not more than four burst tests fall below the specified minimum value.

## (b) Puncture Test:

- (1) Tests to determine compliance with the puncture test requirements must be conducted in accordance with Technical Association of Pulp and Paper Industry (TAPPI), Official Test Method T-803.
- (2) A minimum of four puncture tests must be made and only one puncture test will be permitted to fall below the specified minimum value.

## (c) Edge Crush Test:

- (1) Tests to determine compliance with the edge crush requirements must be conducted in accordance with Technical Association of Pulp and Paper Industry (TAPPI), Official Test Method T-811, A or B.
- (2) A minimum of six tests must be made and only one test is permitted to fall below the specified minimum value, and that one test cannot fall below the specified minimum value by more than 10%. Board failing to pass the foregoing will be accepted if in a retest consisting of 24 tests, not more than four tests fall below the specified minimum value, and none of those tests fall below the specified value by more than 10%.

NOTE 2. The minimum combined weight of facings specified in this table do not apply in connection with board complying with the minimum edge crush test. Any combination of facings is authorised, providing the basis weights of facings in combination with corrugated medium(s) is sufficient to produce corrugated fibreboard that will comply with applicable minimum edge crush requirements.

NOTE 3. Size Extension Formula: If weight of box and contents is less than the maximum weight shown, the maximum outside dimensions for the box may be increased half the percentage that the actual weight is less than the maximum weight specified.

NOTE 4. lb/msf = lbs per 1000 sq. ft.