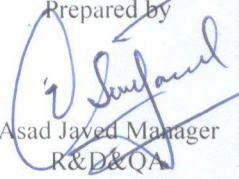
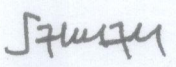


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Document type
WORK INSTRUCTION

Title
METHOD FOR DETERMINATION OF CURLING IN
BOARD/HINGELID CARTON

Prepared by  Asad Javed Manager R&D&QA	Approved by  Salman Fazul -ur Rehman BUMFC	PAGE 1(2)	REV 1	DATE 01.07.2024	DOC NO. WIQA/BU-FC/8.2.4/10
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Approved on (Date): Approved by:	Approved on (Date): Approved by:	Approved on (Date): Approved by:	Approved on (Date): Approved by:

1.0 PURPOSE:

To check the curling in board and hingelid cartons.

2.0 SCOPE:

This method covers determination of curling in, board and hingelid cartons used & produced in BU-FC.

3.0 REFERENCES:

Internal Method

4.0 APPARATUS:

4.1	Cutting Tools	
4.2	Measuring Tape / Ruler	

5.0 PROCEDURE:



SR. NO.	ACTIVITIES
5.1	For board
5.1.1	Specimen/sample should be flat, free from wrinkles.
5.1.2	Put the specimen/sample on a flat surface in such a position that its curled surface is pointing upwards.

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5.1.3	Put the template on the sample, parallel to the straight edge of sample and mark it from all corners. For paper laminate use template of 10x10 cm and for paper board 14x14 cm in size.
5.1.4	Give the numbers to all corners as shown in figure. <div>  </div>
5.1.5	Make a diagonal cut connecting the point 1 with 3 and 2 with 4. <div>  </div>
5.1.6	Lift up the material so that it clearly shows in which direction flaps are turned.
5.1.7	Wait for ½ to 1 minute after cutting.
5.1.8	Measure the height of flaps at right angle with flat surface with a rule or measuring tape.
5.2	For Hingelid Cartons:
5.2.1	Put the hingelid carton on a flat surface in such a position that its curled surface is pointing upwards.
5.2.2	Measure raised edges with a rule or measuring tape at right angle with flat surface and record the height at each point.
5.2.3	Report the values of curl at each corner individually.

5.0 PROCEDURE:

5.3	How to report the curling value:
5.3.1	If the flaps/edges are upward or downward in machine direction side then the curling would be in MD and vice versa.
5.3.2	When H/L is placed with printed side up and corners of the H/L are up, curl is negative and vice versa. The diagonally cut samples, when printed/glazed/coated side is up and flaps are up, curl is negative and vice versa. (as mentioned in Annexure-A).

6.0 RESPONSIBILITY:

- Lab Assistant
- QA Supervisor

