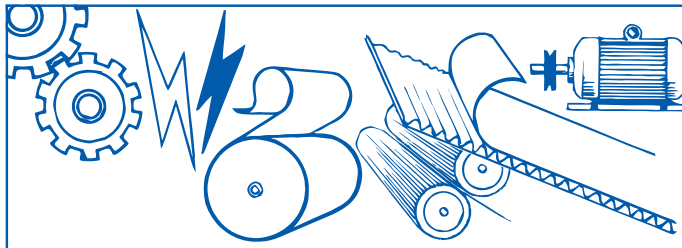
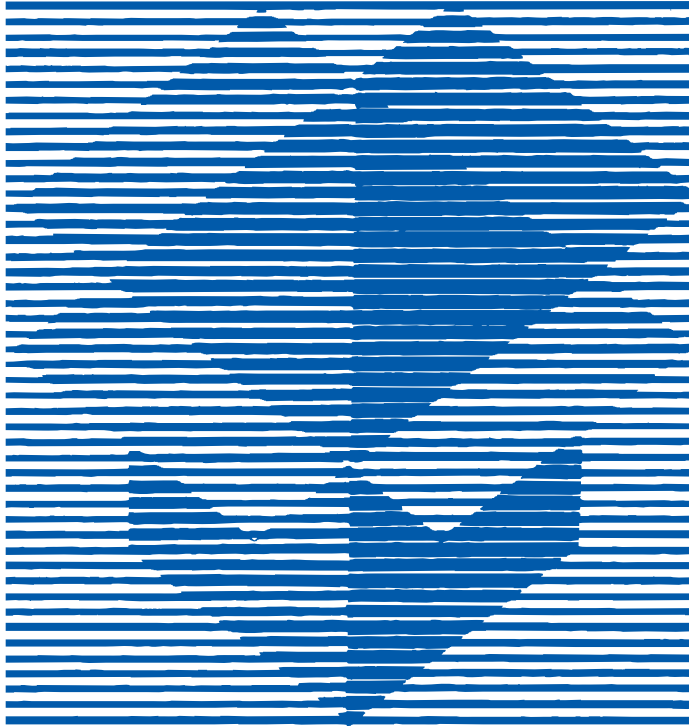


TECHNICAL INFORMATION BOOKLET

FOR PRIVATE CIRCULATION ONLY

FCBM 46:12

Scoring Allowances and Blank Size



**FEDERATION OF CORRUGATED BOX
MANUFACTURERS OF INDIA**

Foreword

The Research & Development Sub Committee of FCBM has been taking up various R&D projects from time to time. These are published in Booklet form and distributed among the members for their reference and use.

Till date, 45 Standard Booklets & Technical Information Booklets on various subject have been published.

The Chairman of R&D committee, Shri Manohar Shetty has made extra efforts in compiling this booklet on a new subject of **Scoring Allowances and Blank Size**

I congratulate the R&D Committee Chairman and his team for the efforts taken in getting the information and compiling the data.

I am pleased to present this booklet- and. I am sure that the information collected, compiled and presented in the booklet form will be found useful to all the members.

Sunil Sethi

President, FCBM

12-12-2012

Preface

FCBM has always been at the forefront of development, related to the Corrugated Industry. The Research & Development Committee of the FCBM has been instrumental in bring out Booklets on various Topics which have been appreciated by one & all.

This year, the R&D Committee has taken up yet another issue related to “Scoring Allowance & Blank Size”. I sincerely thank Mr. Ram Kumar Sunkara for the effort put in by him in this regard.

I hope this booklet will benefit the Corrugated Box Manufacturing. Industry and also others connected with the Industry.

Manohar Shetty

Chairman, R&D Committee

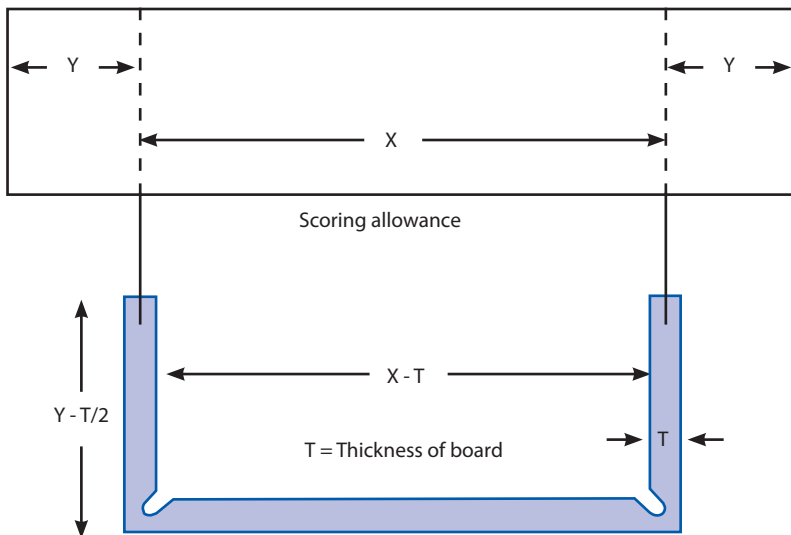
Scoring allowances and Blank size

Scope:

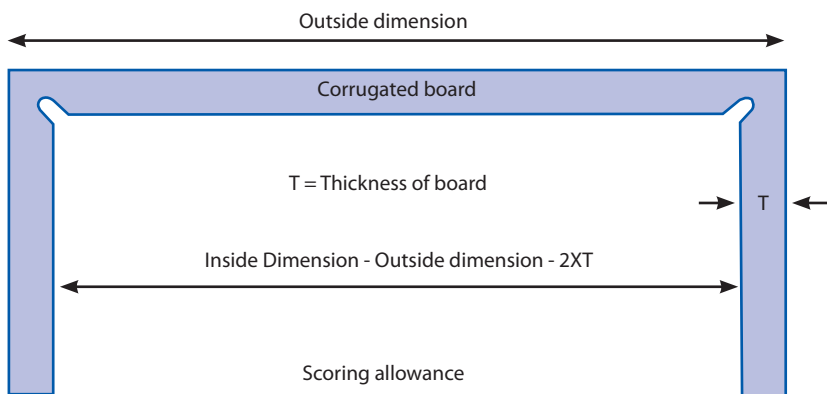
All corrugated box manufacturers have scoring allowances manual for use by their production department. These allowances are not uniform. This technical booklet will help the manufacturers of corrugated boxes as well as user of corrugated boxes a general understanding of the allowances and arrive at a correct blank size for cost calculation purpose.

Scoring allowances theory:

When a corrugated board is scored or creased along two parallel lines, the distance between the facing panels bent up at 90 degrees from the main panel is less than the original distance between the creasing lines. The distance between the two facing panels when parallel is less than the distance between score to score line by an amount equal to the thickness of the corrugated board. Further the distance from the cut edge of the folded panel to the surface of the center panel will be less by an amount equal to one half the thickness of the corrugated board. (See figure 1).



This leads to two dimensions of a corrugated box referred to as Inside dimensions (ID) and Outside dimensions (OD). The outside dimensions are more by an amount equal to twice the thickness of the corrugated box. (See fig 2)



The scoring allowances have been calculated on this fundamental principle.

Specifying box size:

Box dimensions are always inside dimensions. They must be stated in the sequence of Length, Width and height.

Specifying blank or sheet size:

When specifying the blank or sheet size, the first dimension is always the width measured parallel to flute and the second dimension is always length measured perpendicular to the flute.

Manufacturer's Joint:

The manufacturer's joint for single wall (3 Ply) must have 32 mm overlap of material. To have a material overlap of 32 mm, the manufacturer's joint width to be 32 mm plus one half of board thickness.

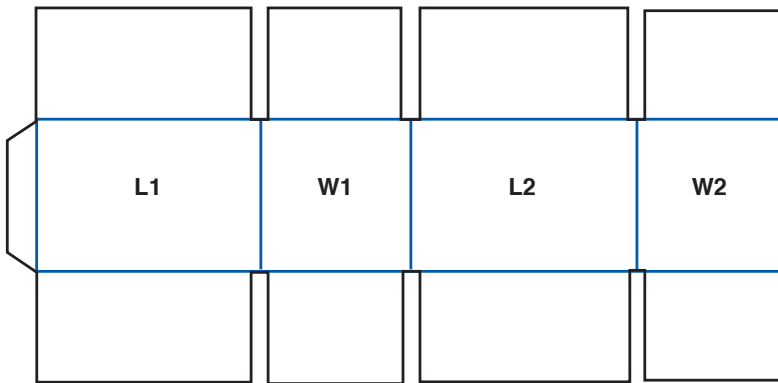
The manufacturer's joint for double wall (5 Ply) must have 38 mm overlap of material. To have a material overlap of 38 mm, the manufacturer's joint width to be 38 mm plus one half of board thickness.

The manufacturer's joint for triple wall (7 Ply) must have 51 mm overlap of material. To have a material overlap of 51 mm, the manufacturer's joint width to be 51 mm plus one half of board thickness.

Recommended scoring allowances:

Recommended scoring allowances for various box styles are as follows:

Box style 0201:



Flute	Width of the board				
	W/2+	H+	W/2+	Trim	Total
B	3	8	3	10	24
C	4	10	4	10	28
A	5	13	5	10	33
BB	5	16	5	15	41
BC	6	17	6	15	44
BA	8	19	8	15	50

Flute	Length of the board						
	SF/GF	L 1+	W 1+	L 2+	W 2+	Trim	Total
B	34	3	3	4.5	1.5	10	56
C	35	4	4	6	2	10	61
A	36	5	5	7.5	2.5	10	66
BB	41	6	6	9	3	16	81
BC	42	7	7	10.5	3.5	16	86
BA	44	8	8	12	4	16	92

SF/GF : Stitched flap / Glued flap (Manufacturers joint)

Caution:

Much effort has been taken to ensure that scoring allowances will provide proper inside dimensions when the box has been assembled. However due to higher paper GSM, board calliper variation, loss of calliper in converting the board, it may be necessary to adjust some allowances to correct inside dimension variation.-

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