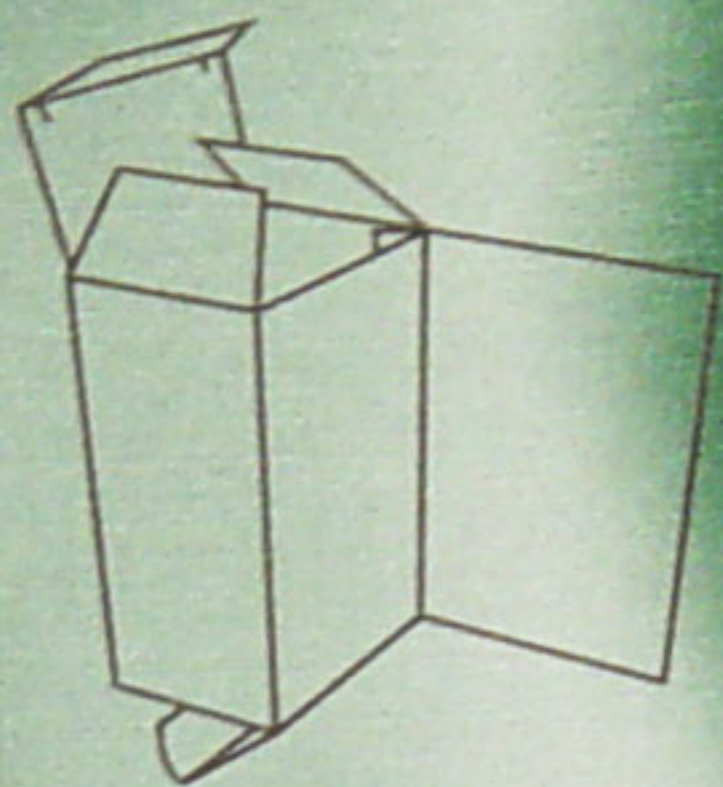


# THE ECMA CODE of FOLDING CARTON STYLES



# THE ECMA CODE of FOLDING CARTON STYLES

Reprint, April 2007

Issued by:



EUROPEAN CARTON MAKERS ASSOCIATION  
P.O. Box 85612  
NL-2508 CH The Hague

copyright © 2000, ECMA The Hague, The Netherlands

All rights are reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher.

Printed by Stimuka Rijswijk, The Netherlands.

## Introduction

The ECMA (European Carton Makers' Association) wants by the present "Code" to provide a convenient, standardised tool to help find solutions in cartonboard packaging to both the folding carton manufacturer and the customer.

The first issue of the ECMA-Code of 1967 was a real pioneers' work. At that time, the long seam glued styles were predominant in the folding carton industry. The computer aided design (CAD) was almost unknown. Due to new techniques applied throughout design, manufacturing, packing and shipping processes as well as environmental regulations the folding cartons developed multiple variations and new styles.

The present, new issue of 1992 shall meet the extended requirements:

- 1) Technically logical standard handbook for the folding carton industry **as well as** for its partners, including professional schools.
- 2) Register all known and current styles of folding cartons.
- 3) Present the folding carton as blank as well as in 3-D for a large number of typical solutions.
- 4) Classification according to the construction in an application oriented logic, suited for EDP use (CAD/CAM).
- 5) Cover the same 5 major languages as the ECMA Dictionary, that is English, German, French, Spanish, Italian.

The ECMA wishes you a great success using the New ECMA-Code.

### P. S. Appeal! – Dear user:

More than ever standards live on their further development. You participate actively in this work: Please help us keep it up to date by continuously transmitting us your remarks. Use the attached answerback card or send us your proposals by fax +31 (0)70 363 6348, ECMA-Secretariate. The ECMA-Code Committee thanks you in advance.

## The New ECMA Code's purposes and characteristics

- easily interpretable and easy to understand for both professional and occasional users thus providing a commonly understood language to improve communication between the parties
- shows the basic constructions in few, clearly arranged groups
- **is based on the 3-dimensional shape of the carton as it looks before its use or filling**
- takes into account all the current styles of folding boxes and the like / related cartons in the market
- is the equivalent to the FEFCO-Code in the corrugated industry
- is the link to most standards in
  - packaging, handling and logistics
  - construction; graphics (CAD) and production (CAM)
  - waste handling and environment protection and is being integrated in
  - the standards of the CEN, Centre Europeen de Normalisation
- is structured logically to fit in your EDP applications
- supports training in the industry and at professional schools
- is extendable to include future styles and
- **will get updated for every reprint.**

## Special Notice

### A. Nongoads of the New ECMA Code

The New ECMA Code is not intended to be a mandatory construction manual. The business parties involved are to define the details for their applicational needs. ECMA and its members disclaim any and all warranties, express or implied, regarding both the accuracy of the information contained in this ECMA Code and its application.

### B. Patented and otherwise protected solutions (remark in matrices)

The illustrations in this edition of New ECMA Code are reduced to simplified constructions, abstract pictures. Any user of the ECMA Code has to check on his own responsibility whether or not an element or the whole of the chosen specific solution is subject to protective rights of a third party (patents, designs – see also remark at the bottom of the Group Matrices).

## Distribution

The New ECMA Code goes to

- all ECMA Members and National Associations
- the CEN, Centre Europeen de Normalisation
- selected institutions in the fields of Training and Standards
- selected customers of the Folding Carton Industry (through the individual company)

## Contents

1. **The application of the ECMA Code / How to use**
  - 1.1. Definition of the dimensions of a package
  - 1.2. 2-dimensional illustration
  - 1.3. 3-dimensional illustration
  
2. **The definition of the Groups**
  - 2.1. The logic structure of the groups
  - 2.2. Overview of the Group titles and their definition
  - 2.3. The systematics of the code
  - 2.4. How to find the desired solution and its code
  
3. **Groups A through F, X**
  
  
  
  
  
  
  
  
  
  
4. **Appendix**
  - 4.1. ECMA Code reference list "OLD - NEW"
  - 4.2. Reference list "FFI Catalogue - New ECMA Code"
  - 4.3. Vacant
  - 4.4. List of ECMA partner associations (by Countries)
  - 4.5. Reply card for your suggestions to the New ECMA Code
  - 4.6. Order form for more copies of New ECMA Code

## 1. The application of the ECMA Code (How to use)

### 1.1. Definition of the dimensions of a package

Principle: You start by the front filling opening and in the erected state of the carton to define (A x B x H).

A = Length, the longer side of the open or front fill end  
(respectively the dimension between the side [dust] flaps)

B = Width, the other side of the fill end  
(resp. the other, remaining dimension of the opening)

H = Height or depth, the 3rd dimension of the carton  
(this is not a filling side) see sketch

Crease lines' dimensions: Unless stated otherwise, dimensions are defined from centre of crease line to centre of crease line resp. to the edge of the carton blank.

Exceptions: are to be defined on the specific case between the business parties.

### 1.2. 2-dimensional illustration (blank, carton blank)

Principle: Style drawings are shown from the printed side up (outer side of the finished carton)

Drawing mode: Shown are only the main lines and the crucial details of a given carton or element.

The drawings are limited to the basic styles and the important specialties.

### 1.3. 3-dimensional illustration (erected form, package in volume)

Principle: The 3-dimensional serves primarily the communication between the user (filler) and the manufacturer of the carton.

Drawing mode: The carton is shown in ready-to-use state with its main closure/opening function.

## 2 The definition of the Groups (classification)

### 2.1 The logic structure of the groups

The logic structure is organised as follows:

- Title page (five languages combined)  
(includes group's name, letter and illustration of some typical styles)
  - \*\* Matrix, the synoptical table of all current options within the group (including the code keys and reference to illustrations). The group matrices are repeated in the sequence of the languages.
    - \*\*\* Illustration pages (no text at all)  
(giving code number, 2-D- and 3-D-illustration, sorted after the code). To ease scanning, the code is always put to the outer edge of the page.

The hierarchy is generally built from the simplest to the most complex style and structure. This applies for the groups among themselves as well as for the elements within the group.

Windows, tear-open devices etc. (see especially group X) do not influence the definition of the carton body's code, as long as the main criteria of the group concerned still apply (for example angles, fill end etc.).

#### **Important notice:**

In this **New ECMA** Code the groups comprise all variants of a given style regardless whether the application results in a pre-glued or non-preglued version. this means for example that the classical folding carton with tuck closure always belongs to group A, no matter whether the user buys it as a blank or as a preglued folding carton!

## 2.2. Group titles and their definition

### Group A:

#### Long seam glued folding cartons with rectangular surfaces

- \* A glue seam in H is compulsory ("tube type").
- \* All outer panels have an angle of 90° between each other (except gable top or some sealed closures).

### Group B:

#### Folding cartons with rectangular surfaces, non-long seam glued

- \* There is no long seam glueing (no tube is formed).
- \* A subgroup of locking devices is comprised.

### Group C:

#### Long seam glued folding cartons with non-rectangular surfaces

- \* A glue seam in H is compulsory ("tube type").
- \* At least one of the main body's surfaces (panels) is non-rectangular.
- \* The height H in relation to the bottom may have an angle of 90° or be inclined.

### Group D:

#### Folding cartons with non-rectangular surfaces, non-long seam glued

- \* No long seam glueing in H.
- \* At least one of the main body's surfaces (panels) is non-rectangular.
- \* The height H in relation to the bottom may have an angle of 90° or be inclined.

### Group E:

#### Product-integrated folding carton

- \* Are designed to work in the compound with specific goods/contents.

### Group F:

#### Other folding cartons

- \* This group comprises all styles of folding cartons that cannot be attributed clearly enough to one of the main groups A through E.
- \* A consecutive table with subgroups describes the individual styles directly in full text instead of the 2-dimensional matrix as in A-E.

#### Structure of the subgroups in F:

- 10 = Special design akin to main group A
- 20 = Special design akin to main group B
- 30 = Special design akin to main group C
- 40 = Special design akin to main group D
- 50 = Special design akin to main group E
- 60 = Special design with flat surfaces (panels)
- 70 = Special design with non-straight surfaces
- 80 = Separate inlet devices

### Group X:

#### Auxiliary devices of all groups

- \* The structure is built upon the devices' function and is self-explaining.



2.3. Code-System

<u>Group</u>	<u>Elements</u>			
	9	9	9	9
A	bottom		top	
B	basic shape		lid / flap	
C	body		closure (top or bottom)	
D	base		top closure / lid / cover	
E	product		style (construction)	
F	A-E-oriented sub-groups + specials		individual solution	
X	function		construction	

2.4. How to find the desired solution and its code

1st way: via the **3-dimensional shape** (style):

- look at the synoptical plate on page i 9, showing the 6 groups' typical styles,
- read group according to the basic shape that fits your idea best,
- look up the matrix of the chosen group, then
- skim through the illustrations until you hit the desired style/solution (remember: the more complex the higher the number!), now read the Code number,
- back in the Matrix read the text: first the line, then the column. That's the description/name of the chosen style.

2nd way: through an **existing ECMA-Code**:

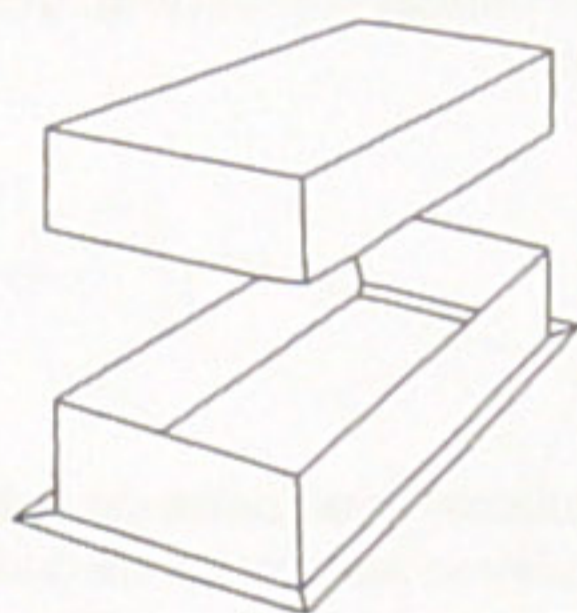
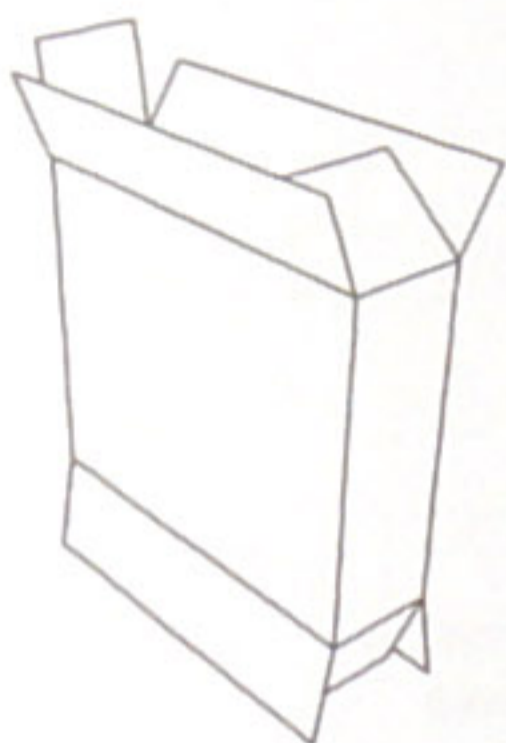
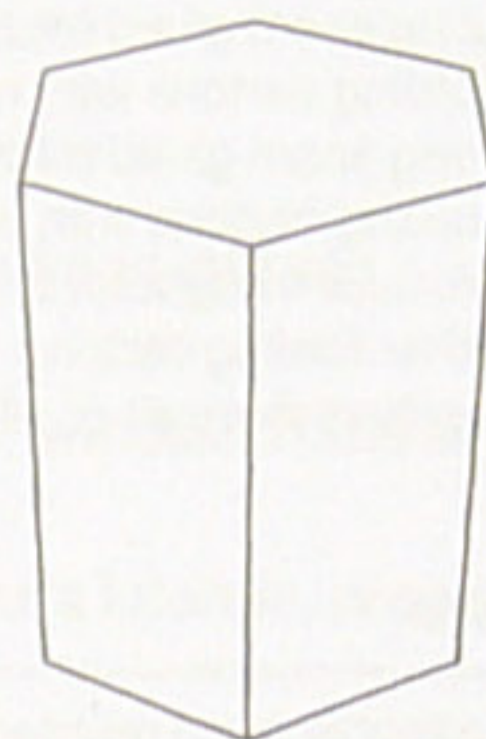
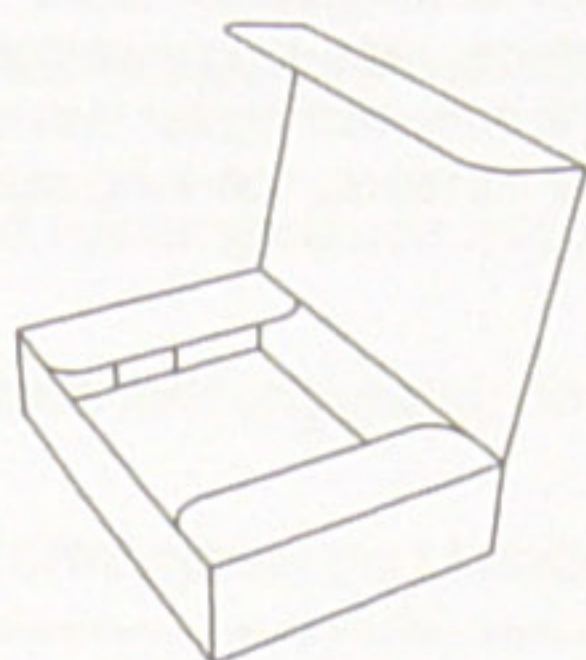
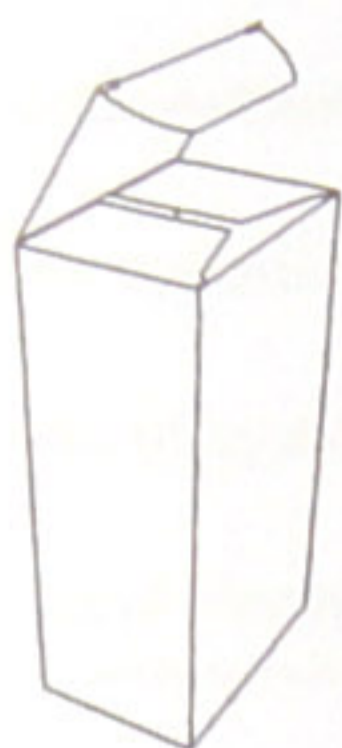
- a) from old ECMA Code (letter plus 3-digit number, e.g. B299): look at the reference list in appendix 4.1. OLD-NEW where you can read the new code;
- b) from actual New ECMA Code (letter plus 4-digit number): Go to group, at the Code (99.. = line, ..99 = column) and check for the mark "illustrated" / "present in Sketch",
  - \* no: search for similar codes where you see the elements. Now you can combine them,
  - \* yes: look for the chosen number among the illustrations and memorize the shape. That's it.

3rd way: from **another Code**:

- for FFI styles: Go through the other reference lists in the appendix and proceed as stated in "2nd way",
- all other: proceed as in "1st way".

**Important:**

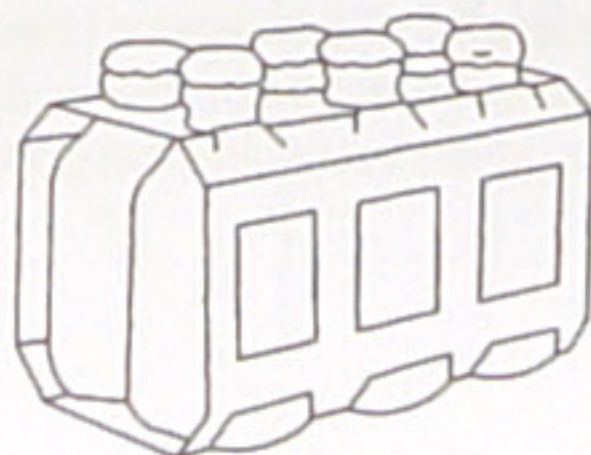
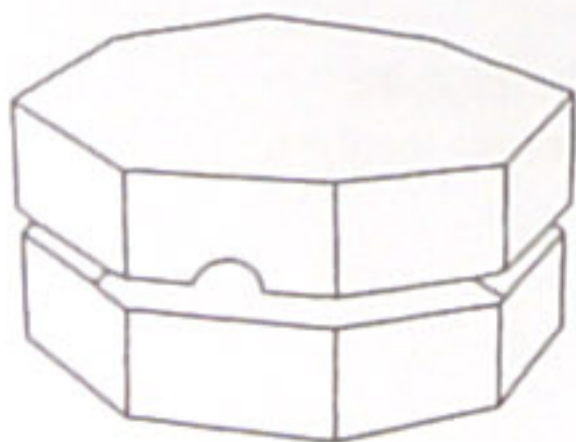
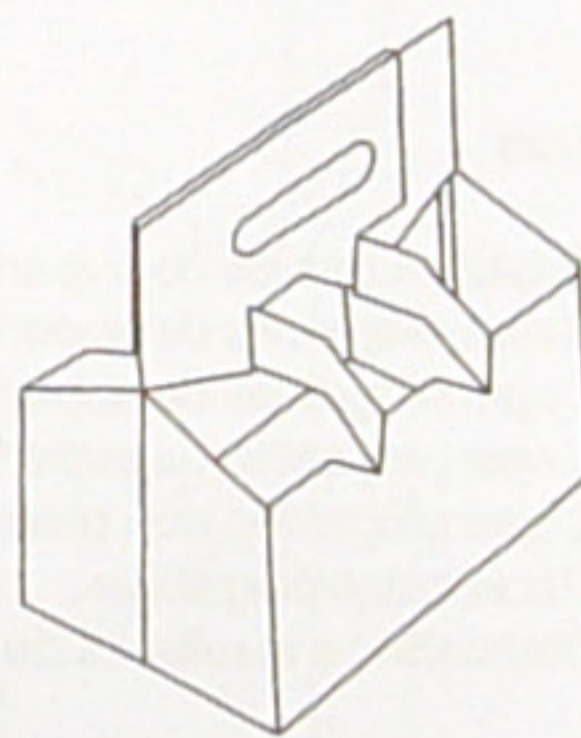
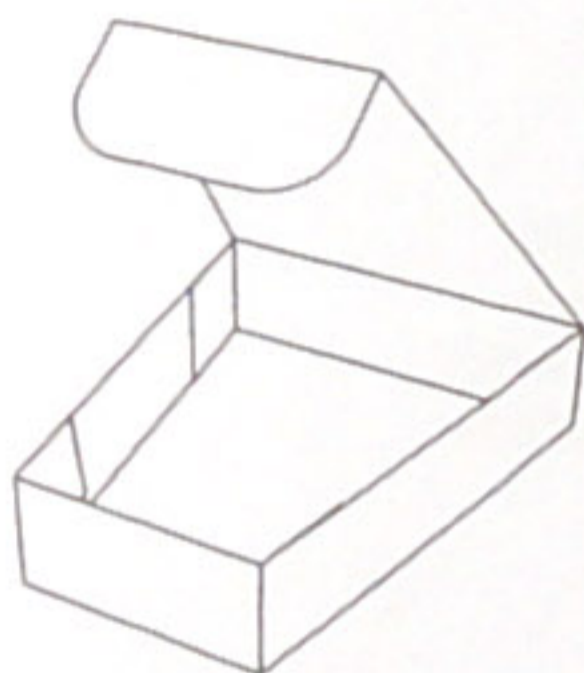
- The tables are self-explaining, of course in combination with the illustrations.
- We strongly suggest that you first read through carefully the whole New ECMA Code. Doing so, you will find the desired solution fast in the future! In this way you will discover the wide variety of solutions contained in the New ECMA Code and you will like this new and most complete standard. In case you do not like it, please go to the "P. S." on the introduction page i 2 and act accordingly. Thanks in advance!



**A**

**B**

**C**



**D**

**E**

**F**

**The Groups**

- A Long seam glued folding cartons with rectangular surfaces
- B Folding cartons with rectangular surfaces, non-long seam glued
- C Long seam glued folding cartons with non-rectangular surfaces
- D Folding cartons with non-rectangular surfaces, non-long seam glued
- E Product-integrated folding cartons
- F Other folding cartons
- X Auxilliary devices of all groups

**Die Gruppen**

- A Faltschachteln rechteckig mit Längsnahtklebung
- B Faltschachteln rechteckig ohne Längsnahtklebung, gefaltet
- C Faltschachteln nicht-rechteckig mit Längsnahtklebung
- D Faltschachteln nicht-rechteckig ohne Längsnahtklebung, gefaltet
- E Faltschachteln mit Produktintegration
- F Sonstige Faltschachteln
- X Verschlüsse und Hilfsvorrichtungen

**Les Groupes**

- A Boîtes pliantes aux surfaces rectangulaires avec patte de collage latérale
- B Boîtes pliantes aux surfaces rectangulaires sans patte de collage latérale, pliées
- C Boîtes pliantes aux surfaces non rectangulaires avec patte de collage latérale
- D Boîtes pliantes aux surfaces non rectangulaires sans patte de collage latérale
- E Boîtes pliantes avec produit intégré
- F Autres boîtes pliantes
- X Dispositifs complémentaires pour tous groupes

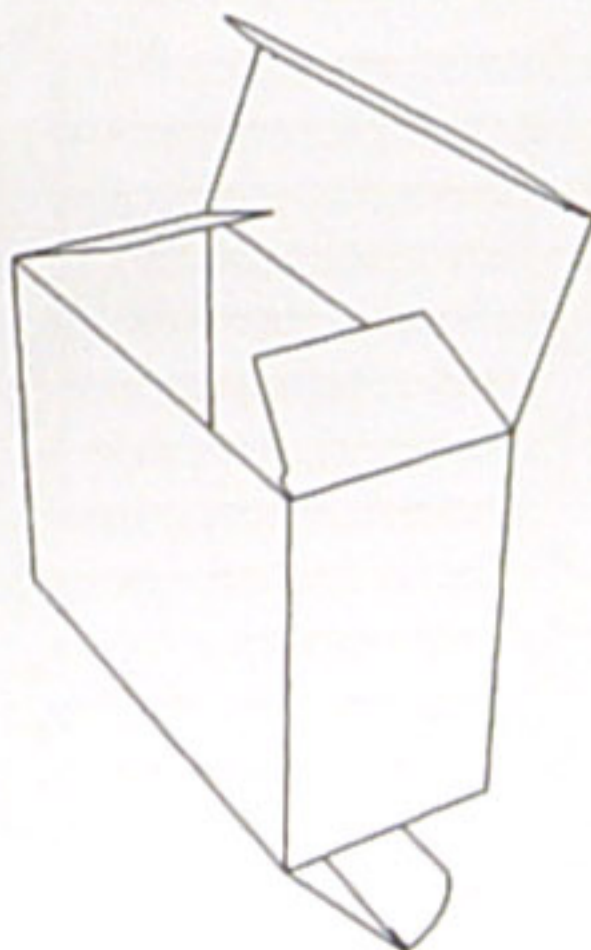
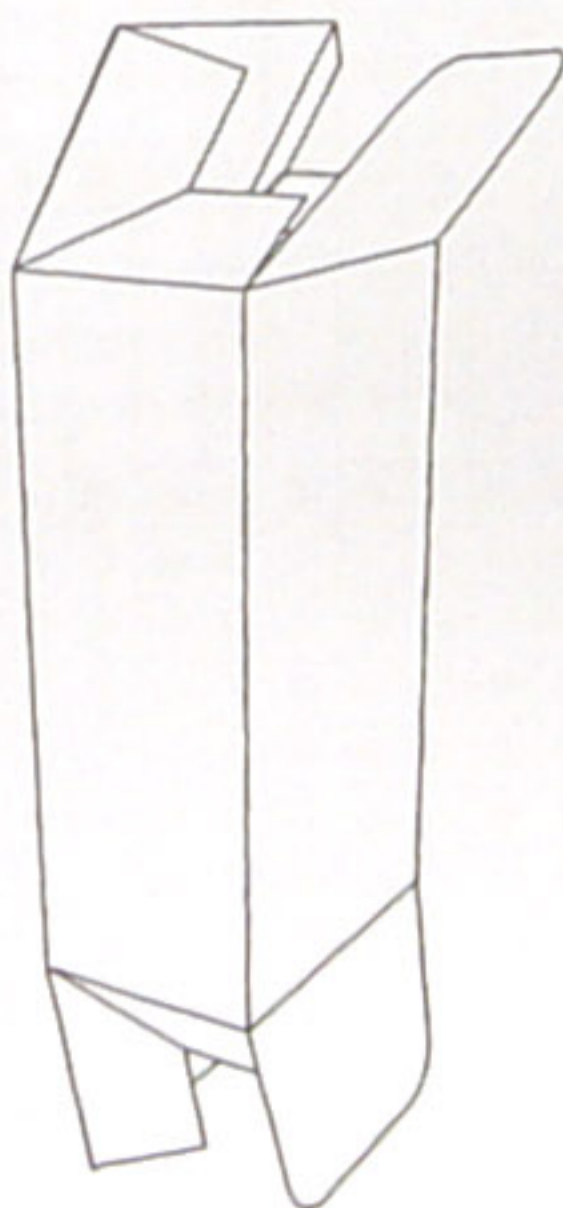
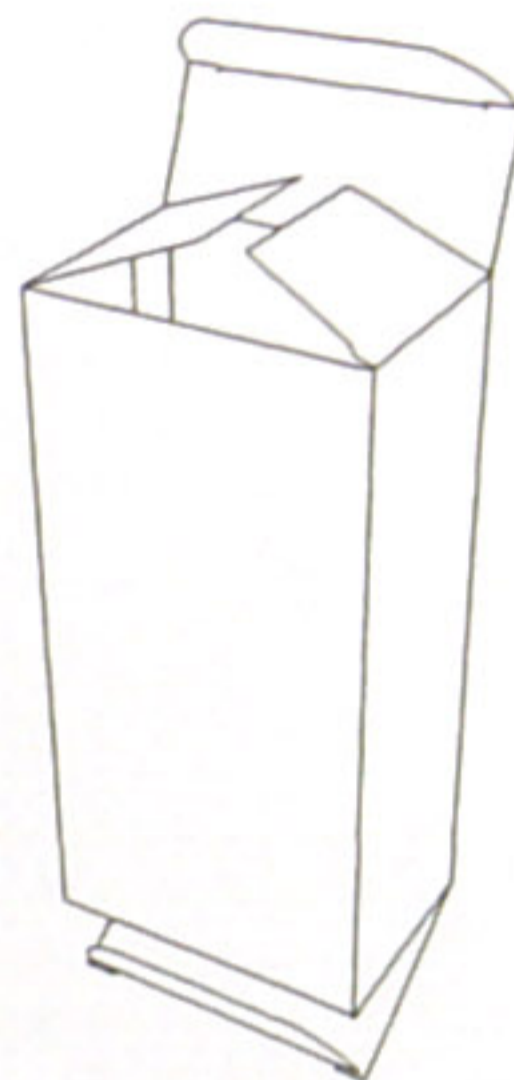
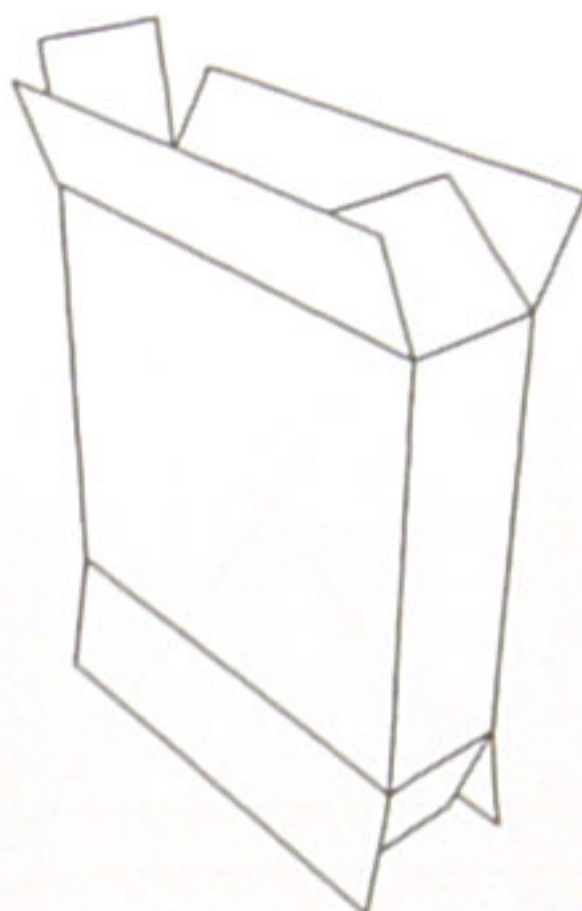
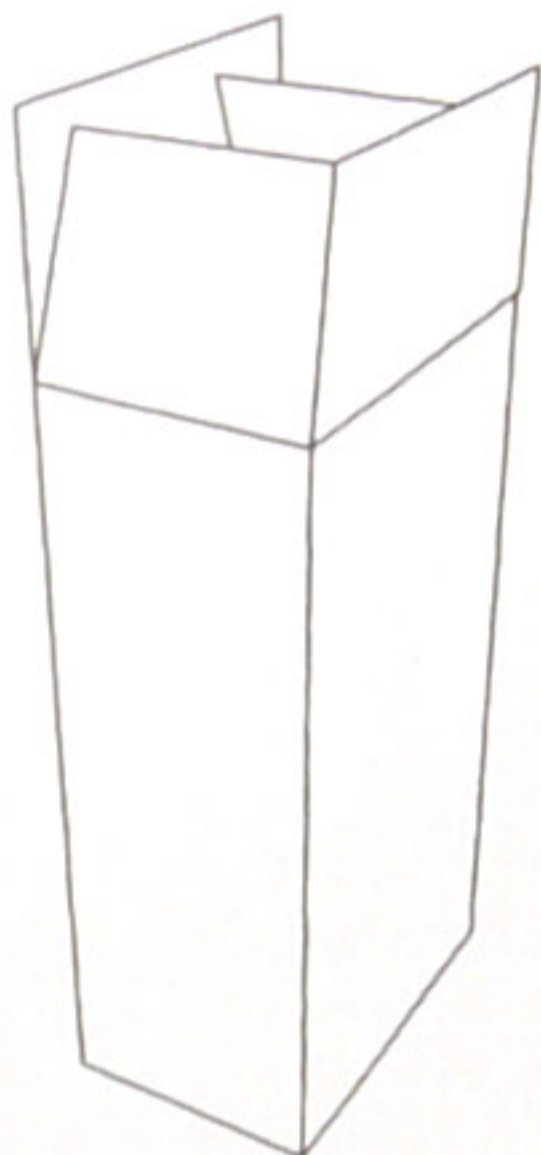
**Los Grupos**

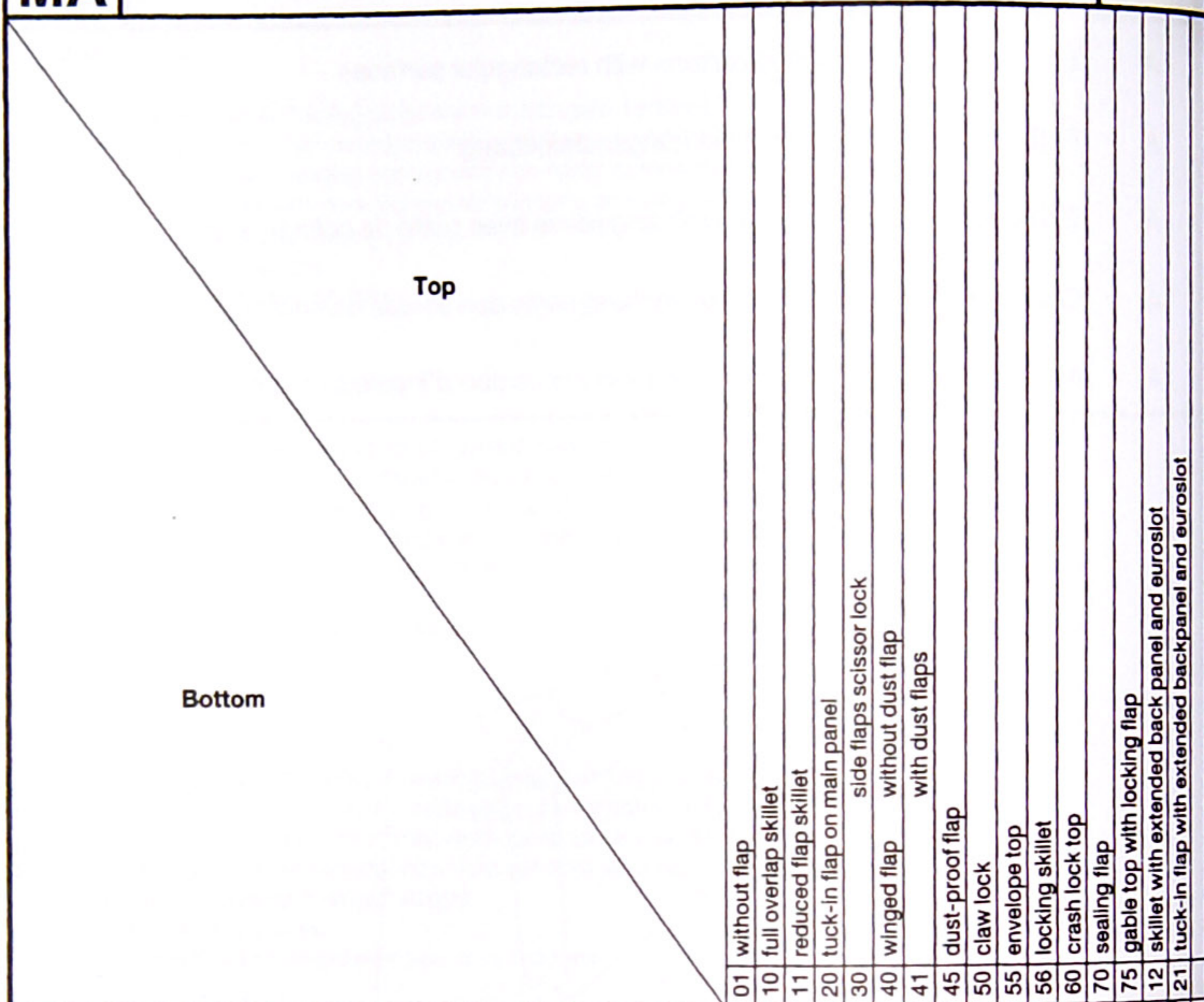
- A Cajas plegables de superficies rectangulares con solapa de encolado lateral
- B Cajas plegables de superficies rectangulares sin solapa de encolado lateral
- C Cajas plegables de superficies no rectangulares con solapa de encolado lateral
- D Cajas plegables de superficies no rectangulares sin solapa de encolado lateral
- E Cajas plegables con producto integrado
- F Otras cajas plegables
- X Dispositivos auxiliares de todos los grupos

**I Gruppi**

- A Astucci pieghevoli a facce rettangolari con lembo d'incollatura laterale, piegati
- B Scatole pieghevoli rettangolari (senza lembo d'incollatura laterale)
- C Astucci pieghevoli a facce non-rettangolari con lembo d'incollatura laterale, piegati
- D Scatole con una o più facce non-rettangolari senza lembo d'incollatura laterale, piegati
- E Cartoncini a prodotto integrato
- F Altri cartoncini / fustellati
- X Dispositivi ausiliari di tutti i gruppi

- A Long seam glued folding cartons with rectangular surfaces
- A Faltschachteln rechteckig mit Längsnahtklebung
- A Boîtes pliantes aux surfaces rectangulaires avec patte de collage latérale
- A Cajas plegables de superficies rectangulares con solapa de encolado lateral
- A Astucci pieghevoli a facce rettangolari con lembo d'incollatura laterale, piegati



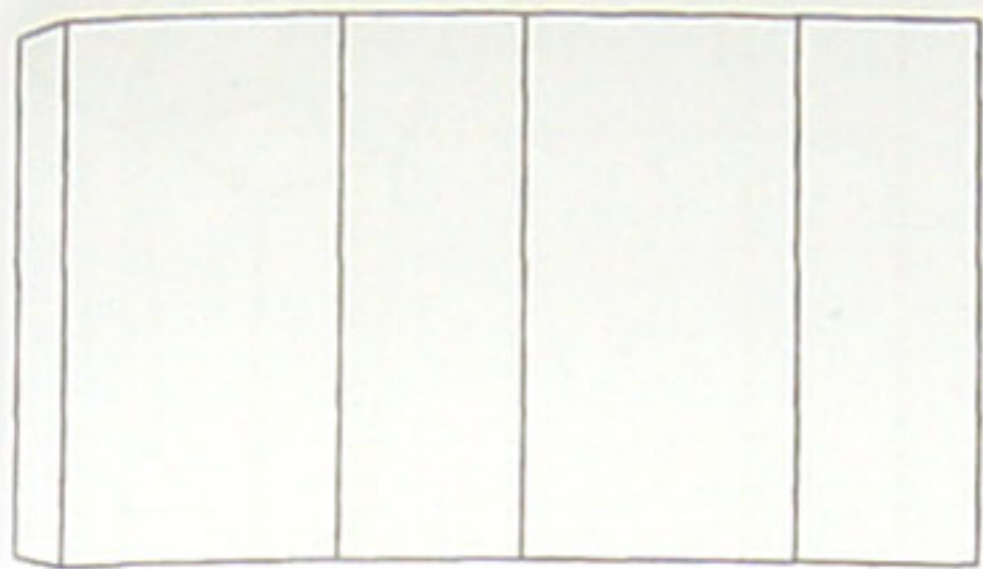


	01	10	11	20	30	40	41	45	50	55	56	60	70	75	12	21
01 without flaps	X	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
10 full overlap skillet	●	X	●	●	●	●	●	●	●	●	●	●	●	●	●	●
11 reduced flap skillet	●	●	X	●	●	●	●	●	●	●	●	●	●	●	●	●
20 tuck-in flap on main panel	●	●	●			●	●	●	●	●	●	●	●	●	●	●
21 tuck in on main panel				X	X											
22 mirrored tuck in on main panel				X	X											
23 aerotuck on back panel				X	X											
24 aerotuck on main panel				X	X											
30 tuck-in flap with scissor lock side flaps	●	●	●			●	●	●	●	●	●	●	●	●	●	●
31 moved				X	X											
32 mirrored				X	X											
33 flaps lying opposite each other side				X	X											
34 middle				X	X											
40 winged flap without dust flap	●	●	●	●	●	X	●	●	●	●	●	●	●	●	●	●
41 winged flap with dust flap	●	●	●	●	●	●	X	●	●	●	●	●	●	●	●	●
45 dust-proof flap	●	●	●	●	●	●	●	X	●	●	●	●	●	●	●	●
50 claw lock	●	●	●	●	●	●	●	●	X	●	●	●	●	●	●	●
55 envelope base	●	●	●	●	●	●	●	●	●	X	●	●	●	●	●	●
56 locking skillet	●	●	●	●	●	●	●	●	●	●	X	●	●	●	●	●
60 crash lock base	●	●	●	●	●	●	●	●	●	●	●	●	X	●	●	●
61 with covered bottom end	●	●	●	●	●	●	●	●	●	●	●	●	●	X	●	●
70 sealing flap	●	●	●	●	●	●	●	●	●	●	●	●	●	●	X	●

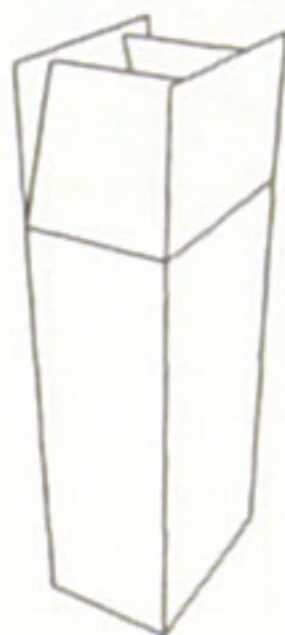
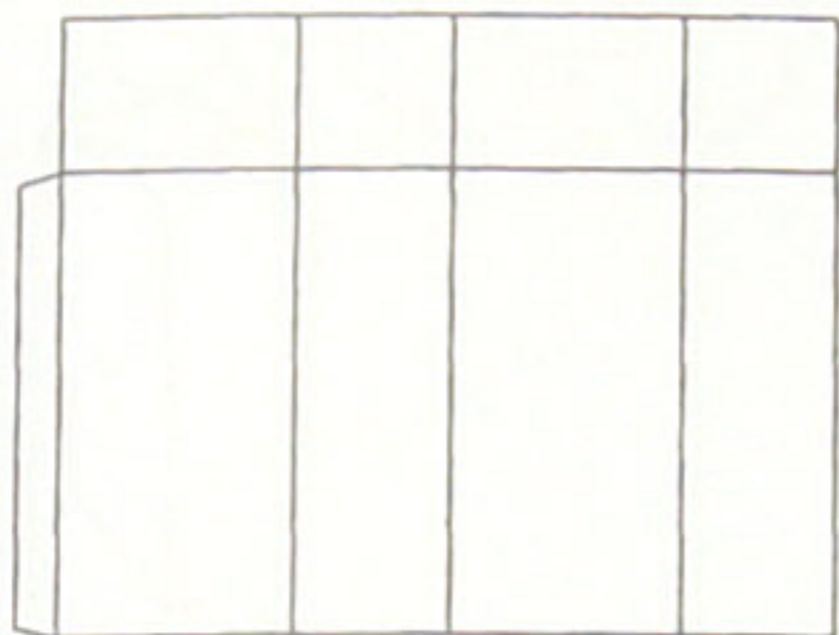
- X flaps same on each side
- more combinations possible
- represented in the sketch

Warning: for patents and other protective rights see introduction page i 3, letter B.

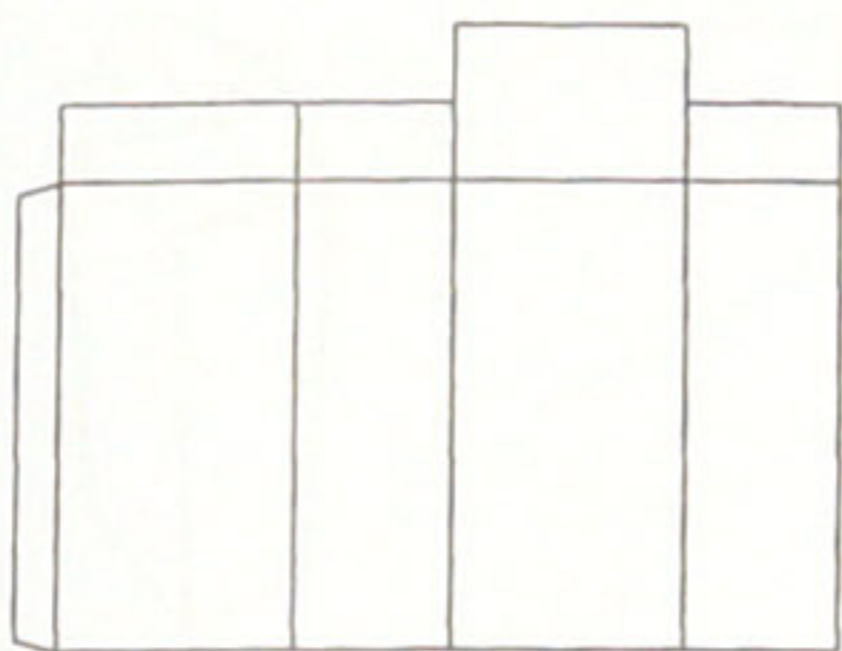
For special designs from A see Group F10.



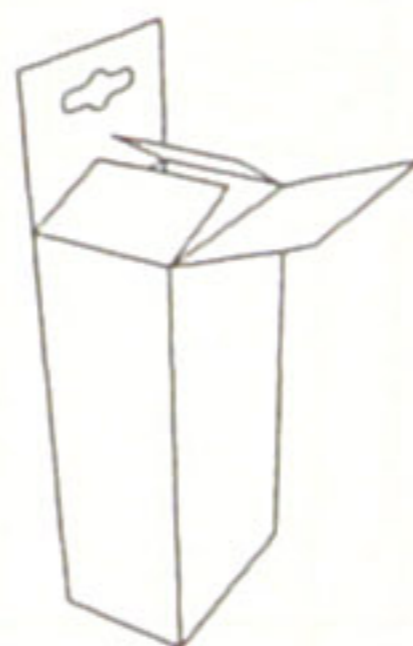
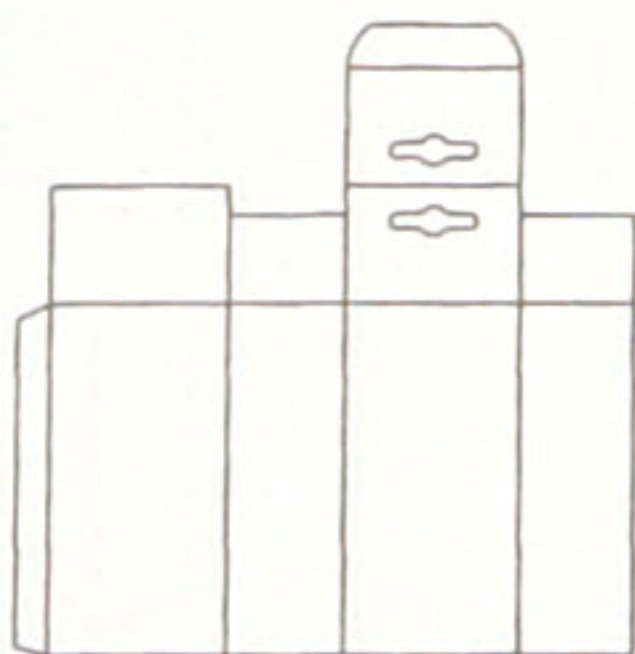
A 0101



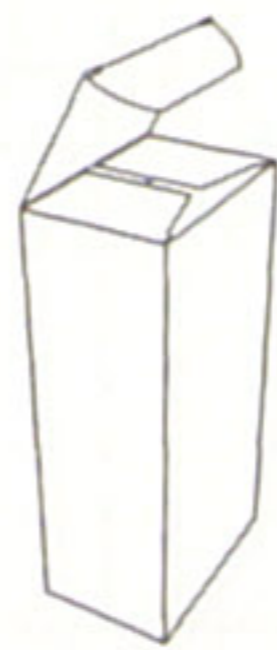
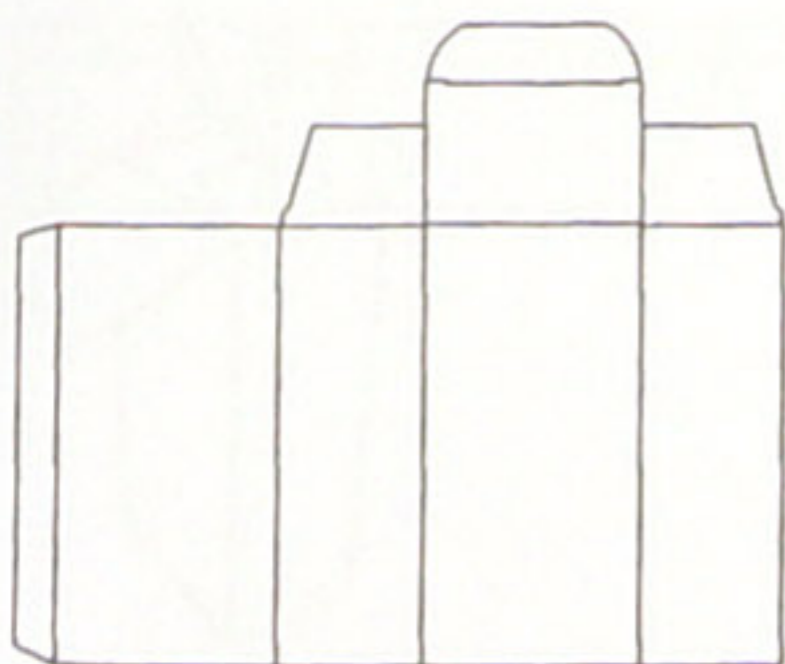
A 0110



A 0111

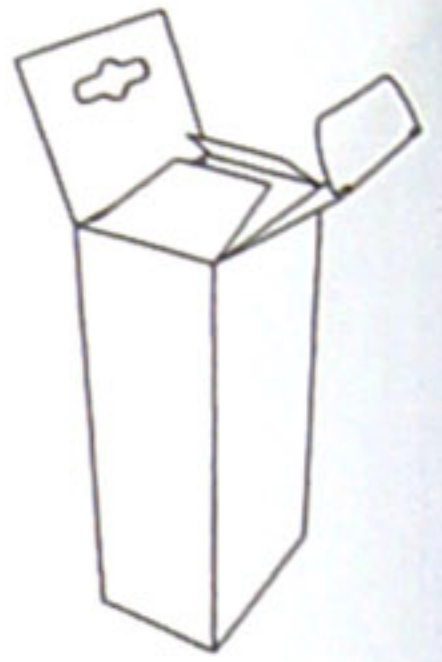
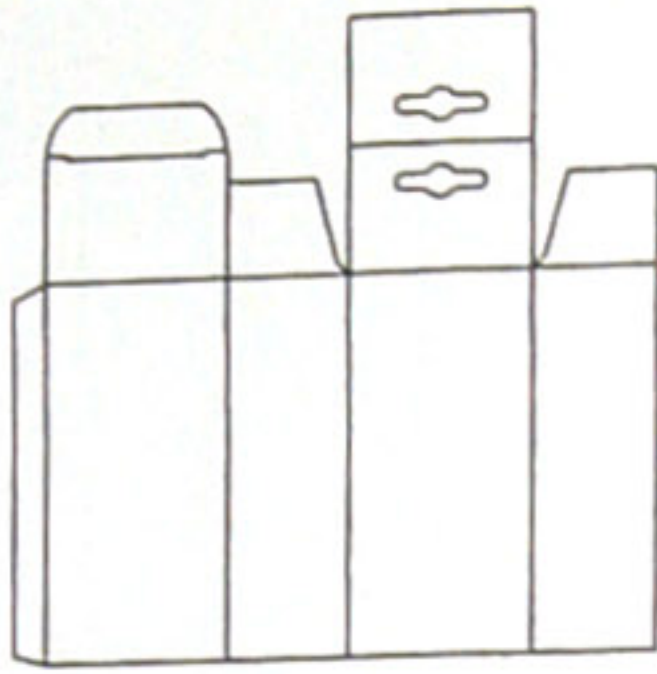


A 0112

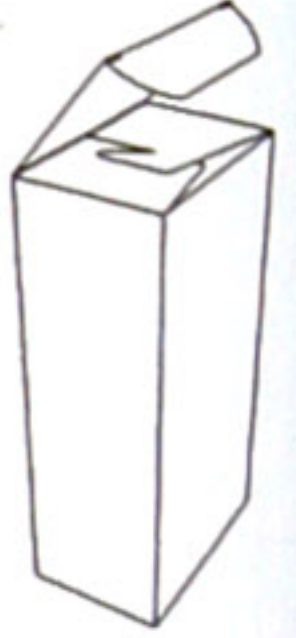
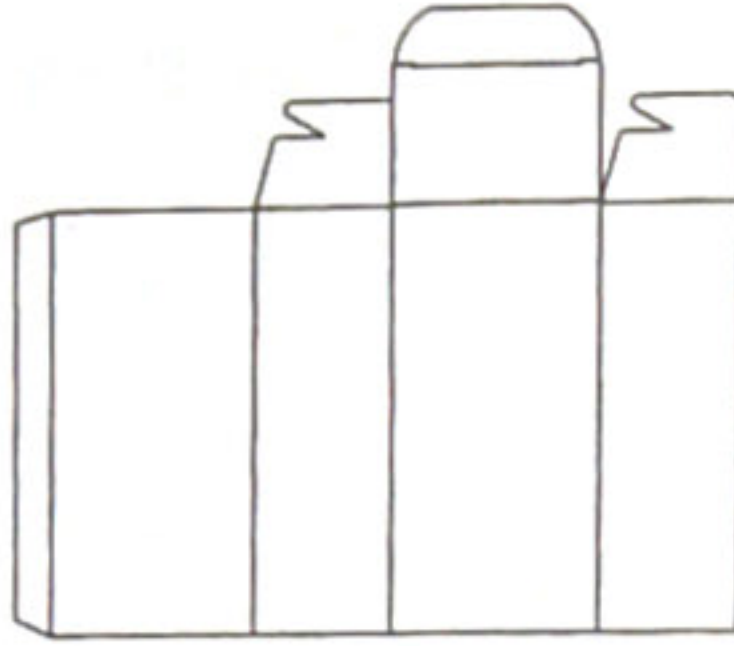


A 0120

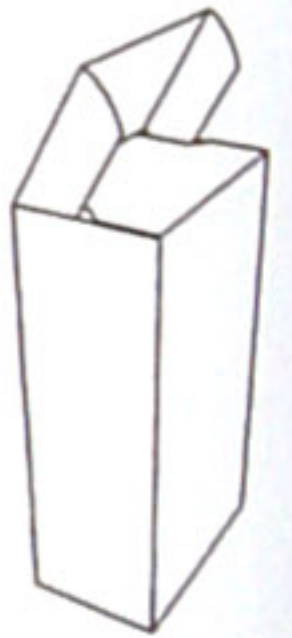
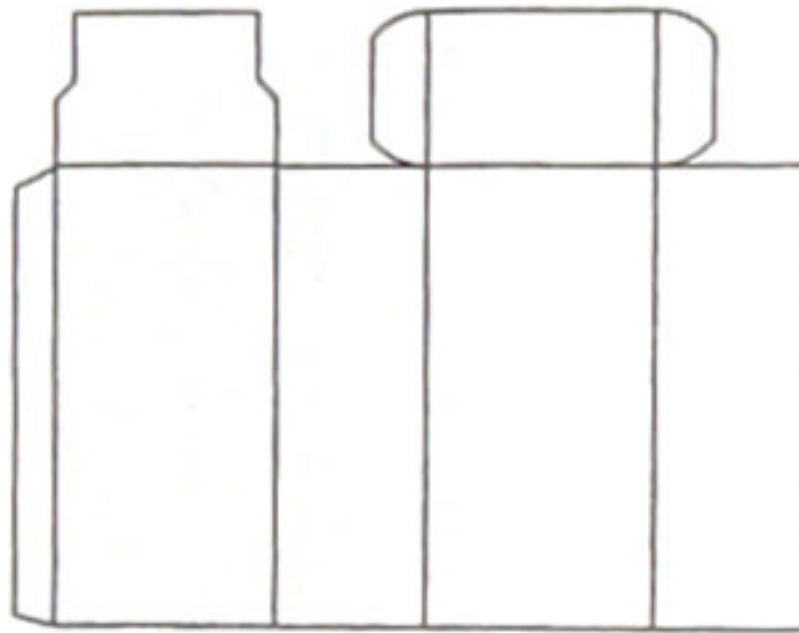
A 0121



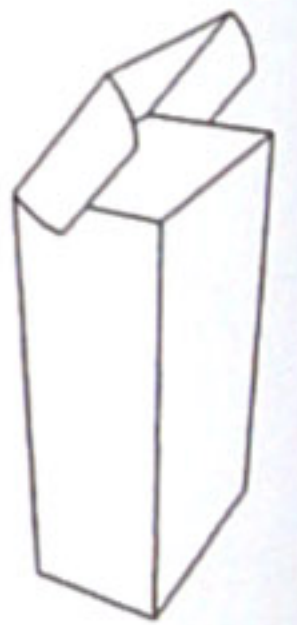
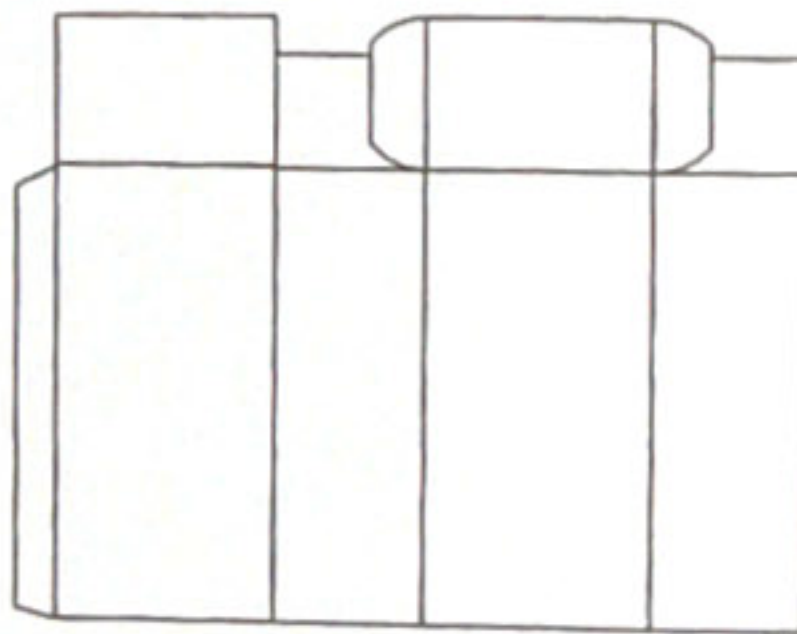
A 0130



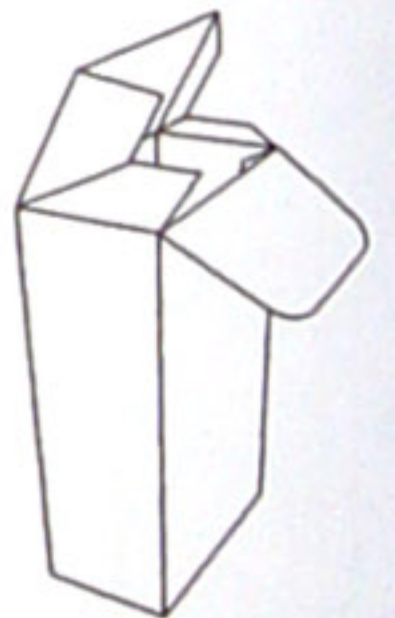
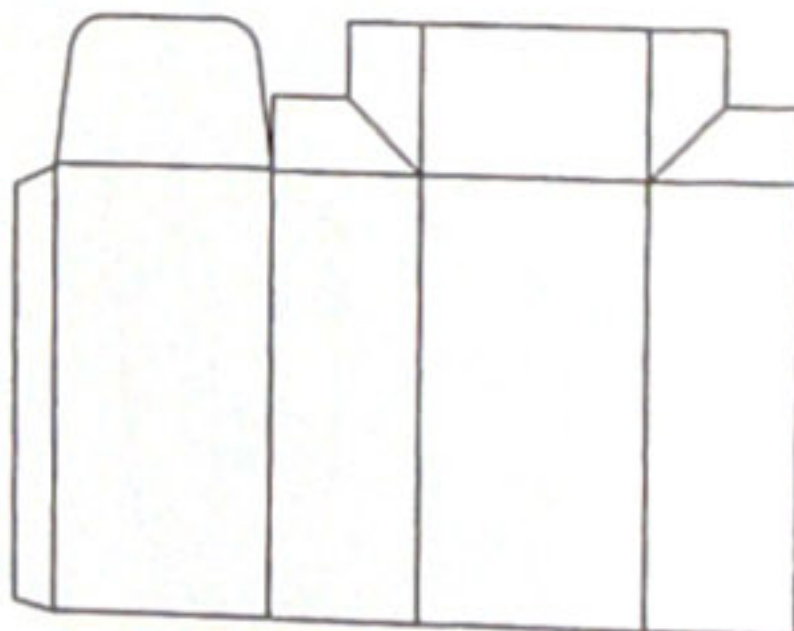
A 0140

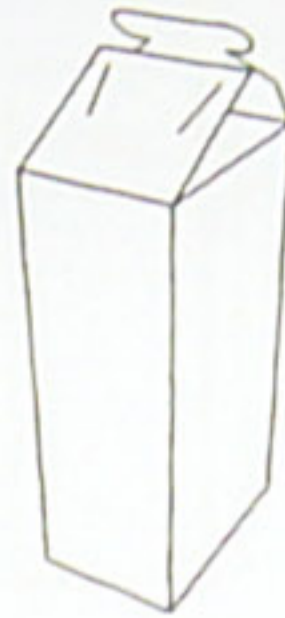
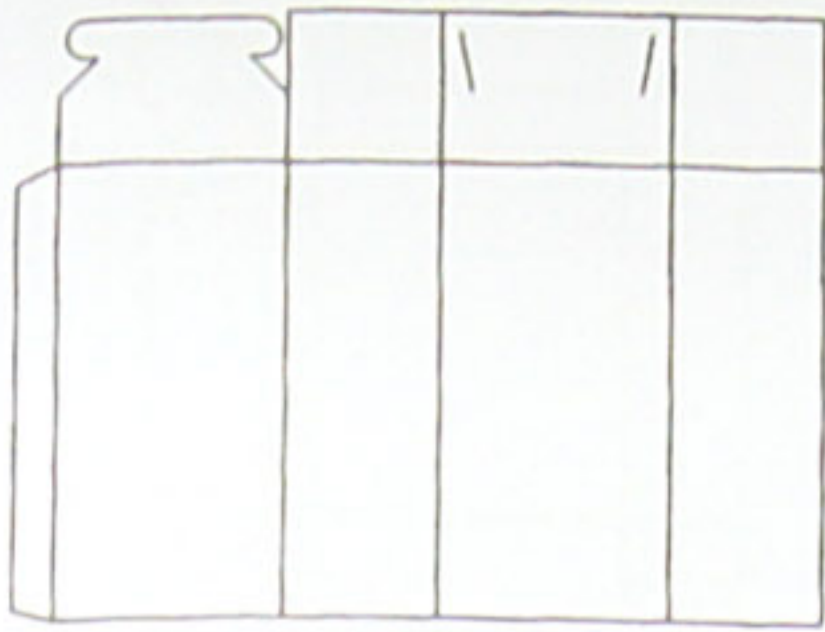


A 0141

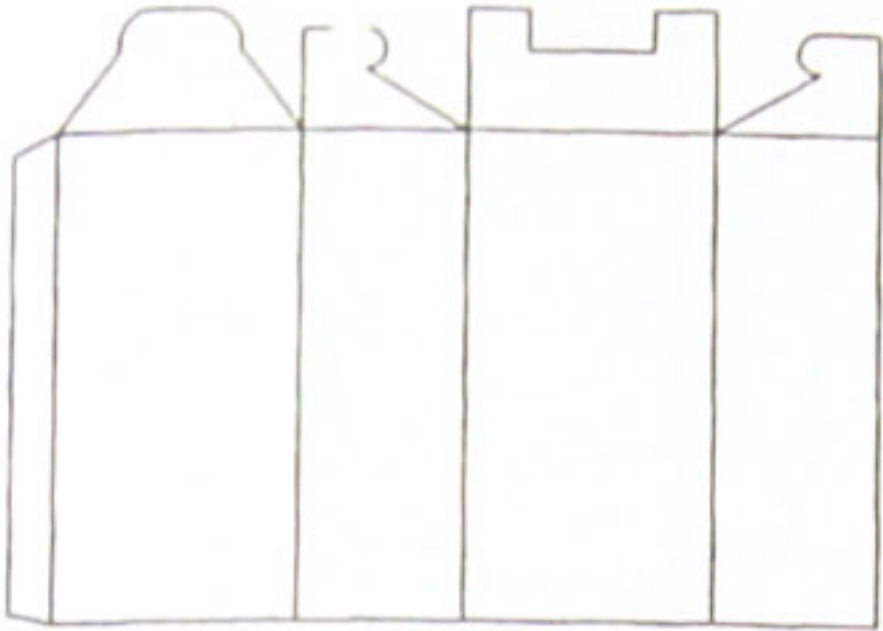


A 0145

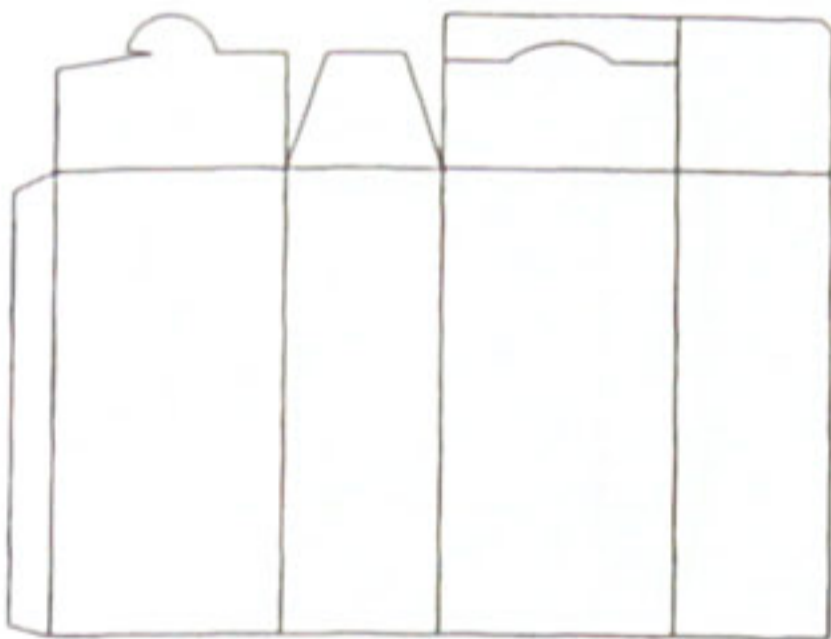




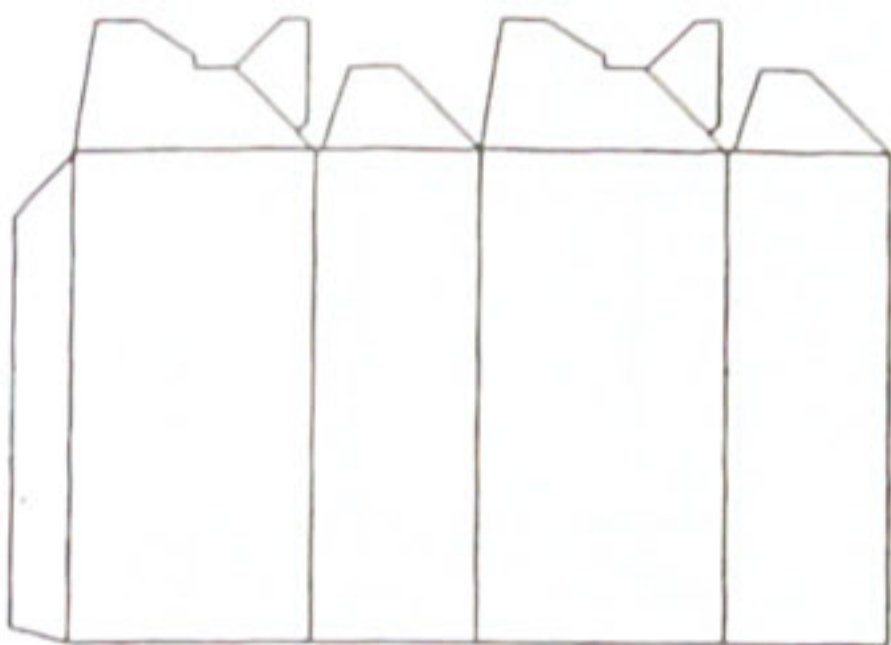
A 0150



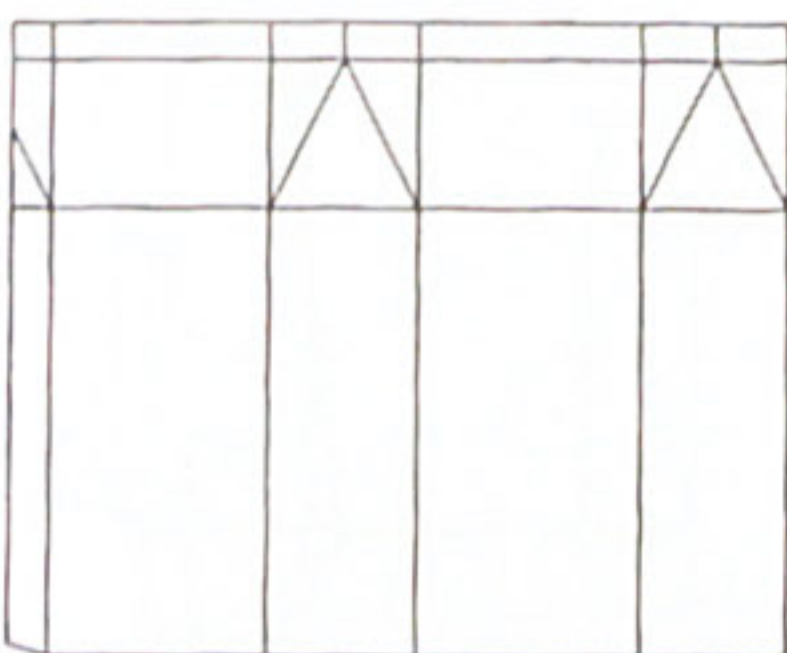
A 0155



A 0156



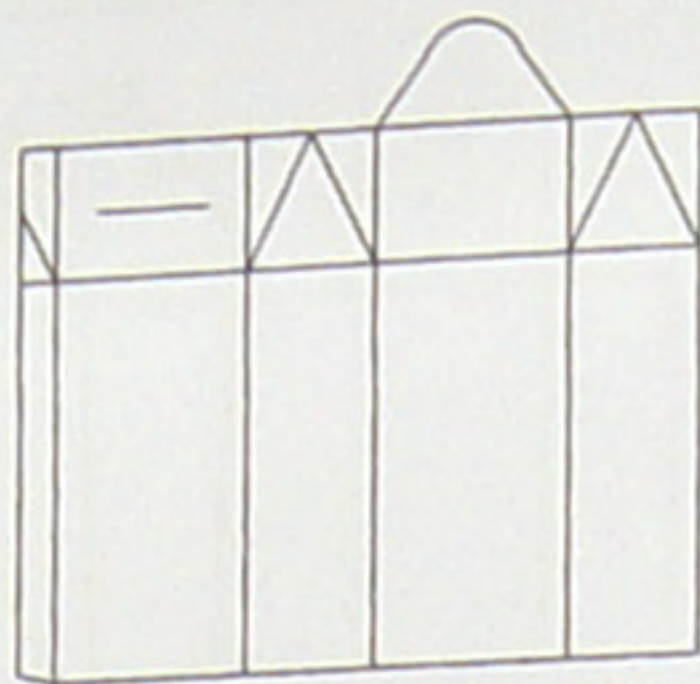
A 0160



A 0170



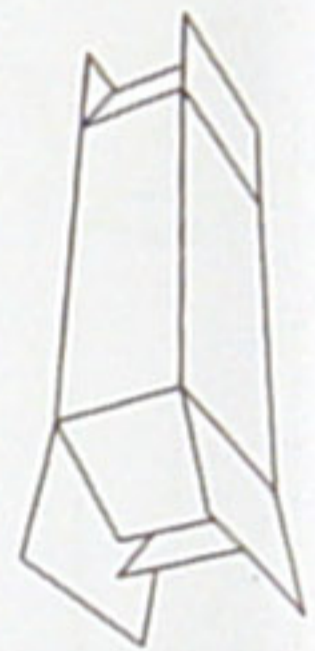
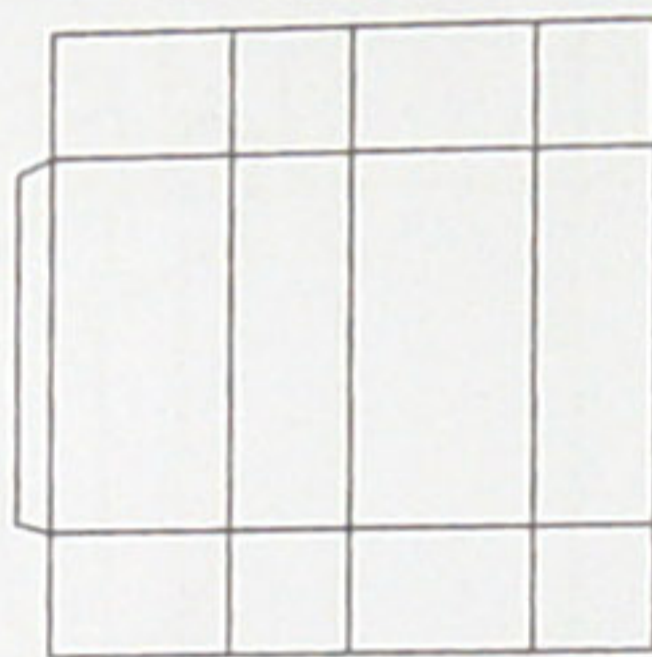
A 0175



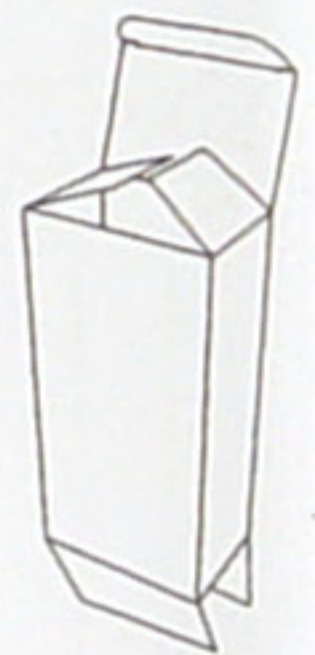
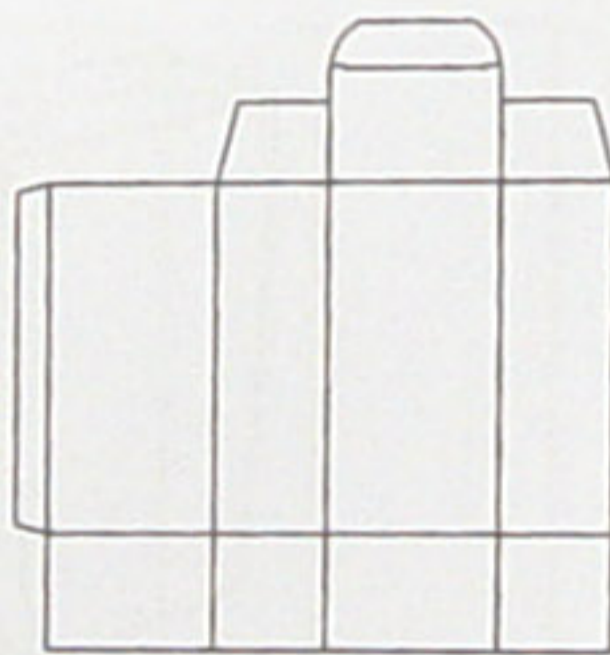
A 1001



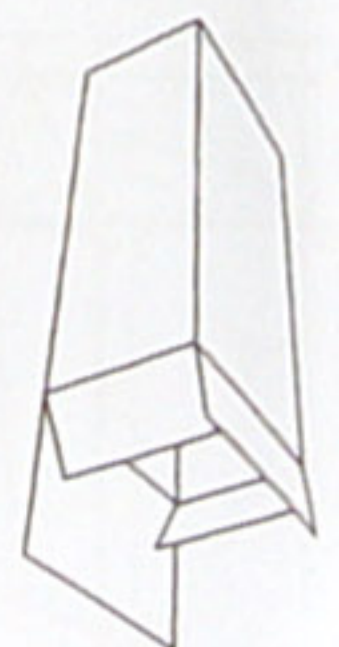
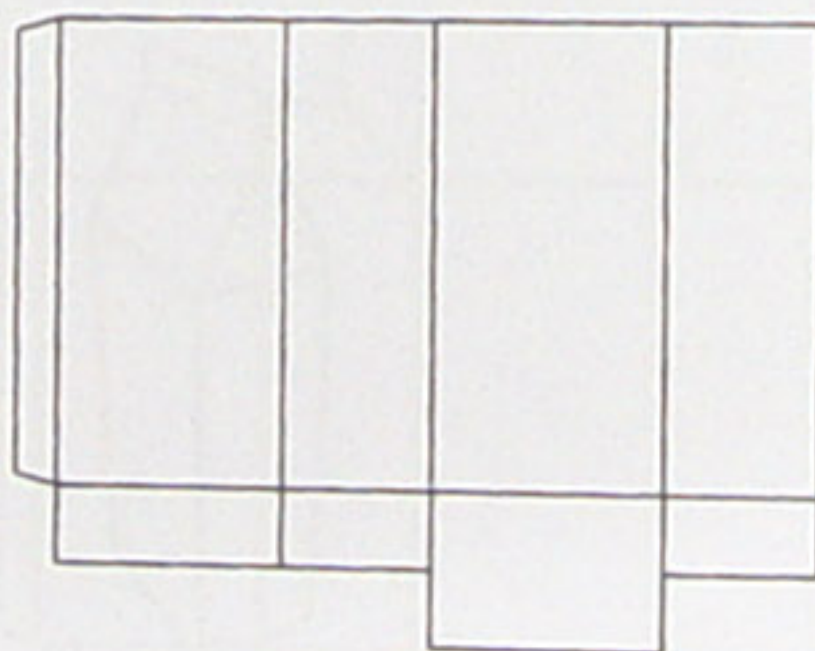
A 1010

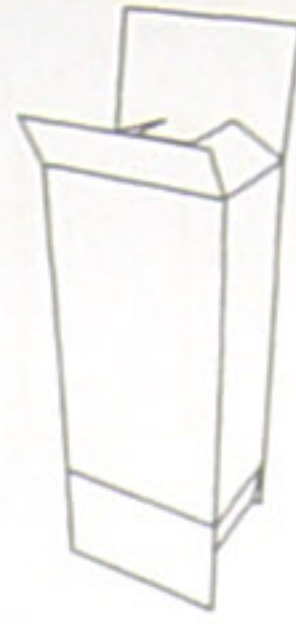
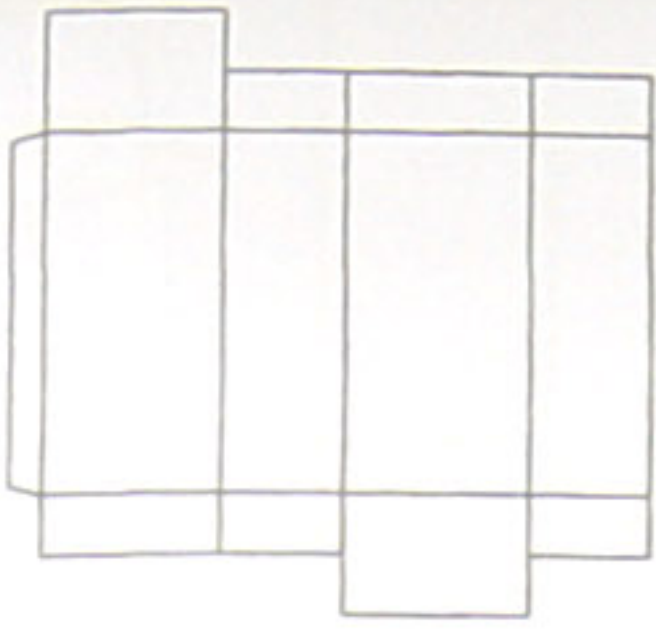


A 1020

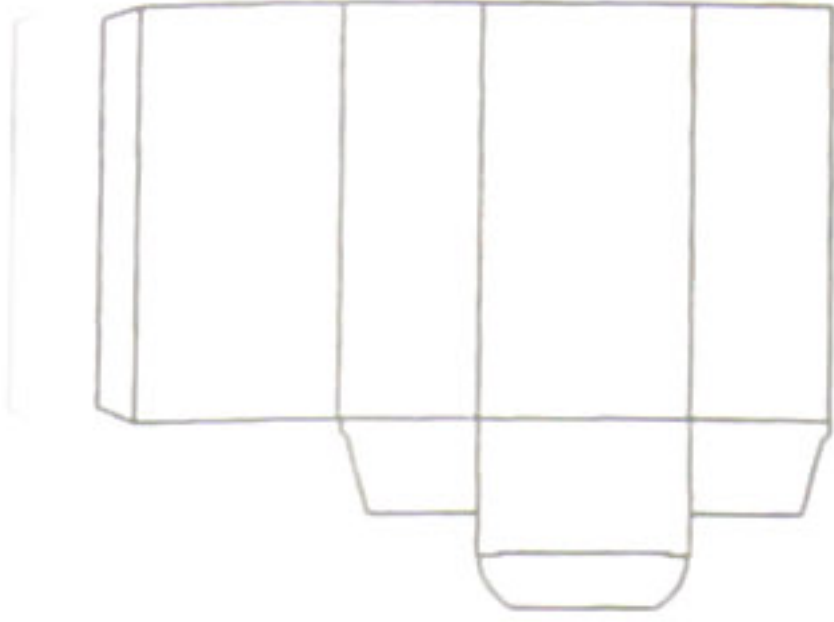


A 1101

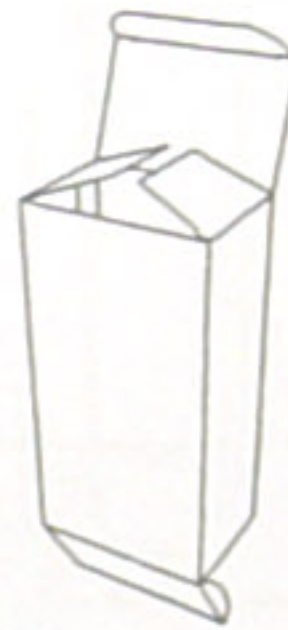
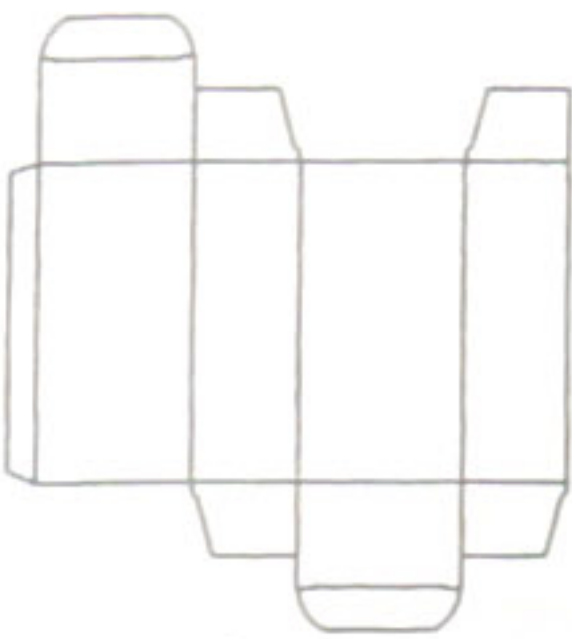




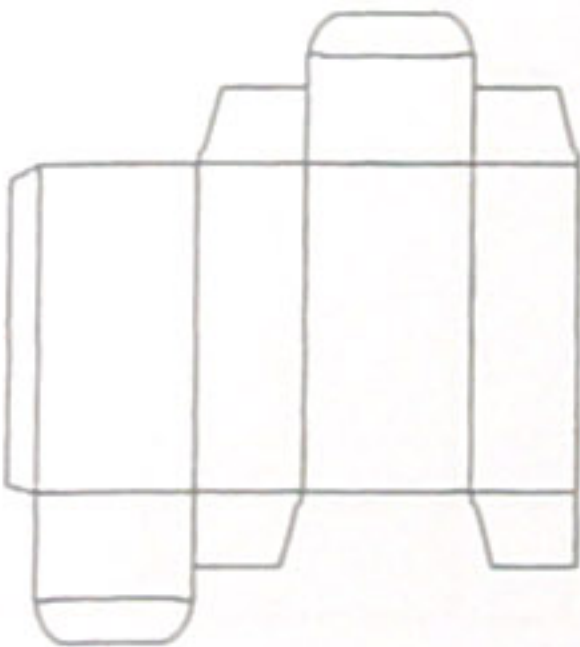
A 1111



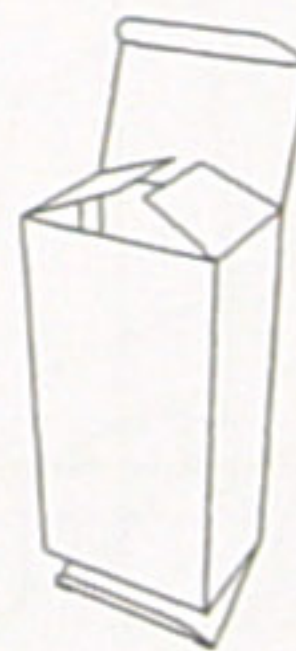
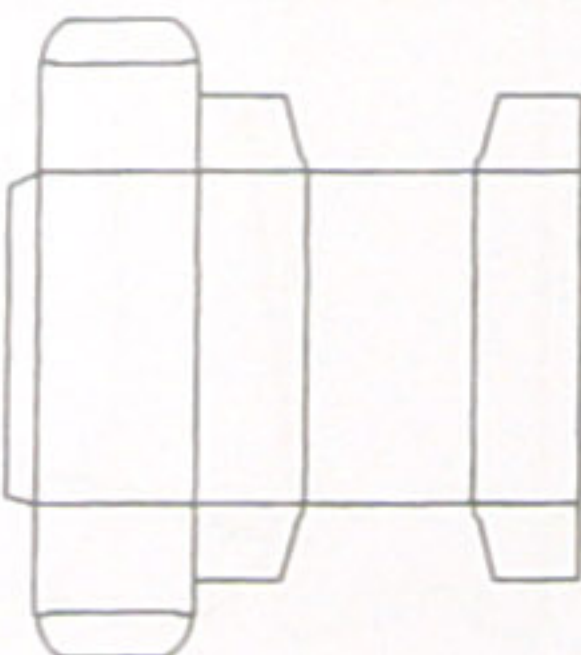
A 2001



A 2120

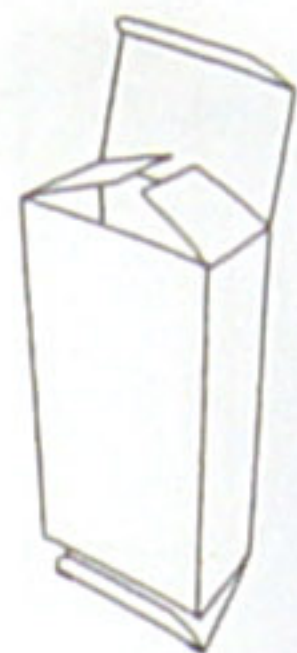
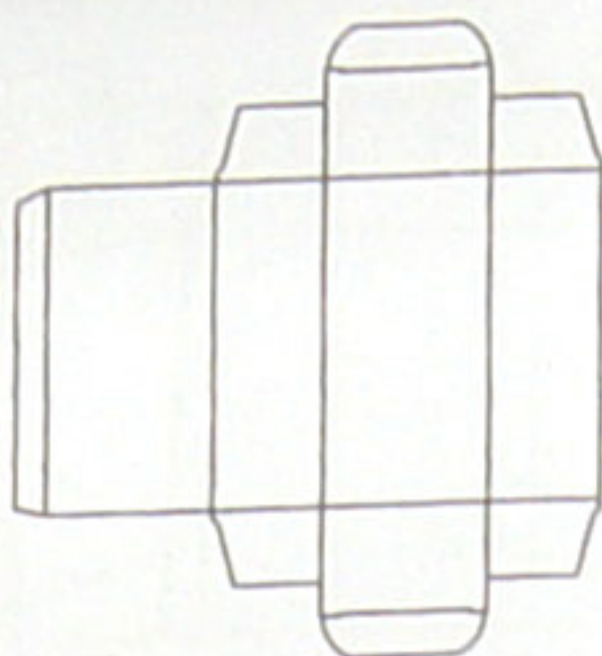


A 2220

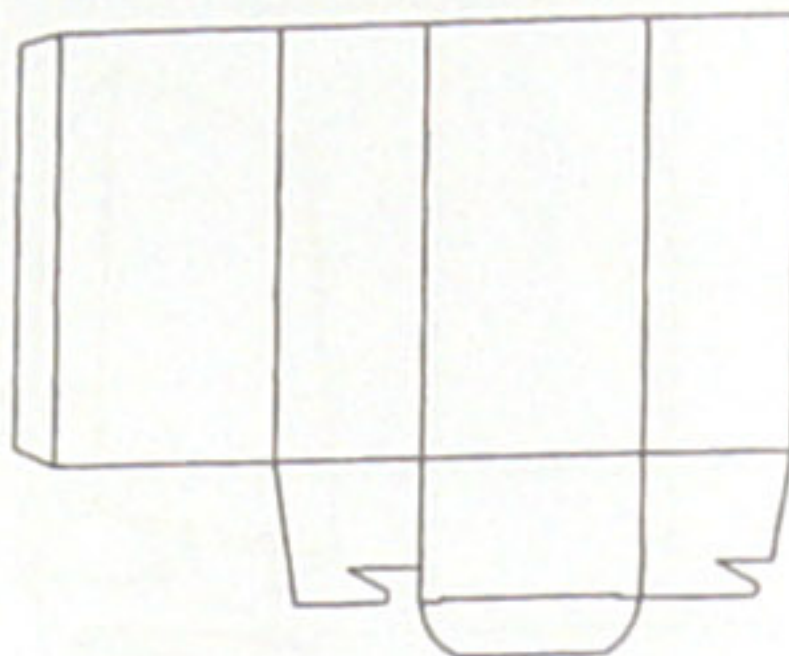


A 2320

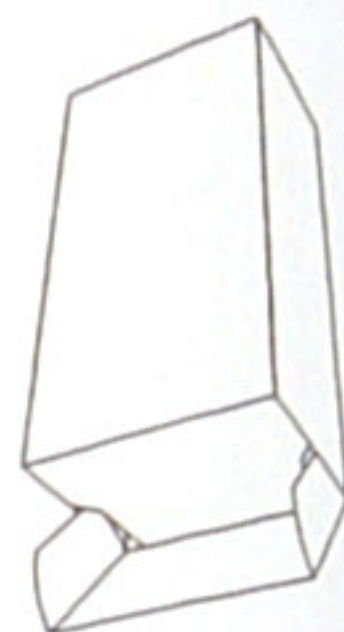
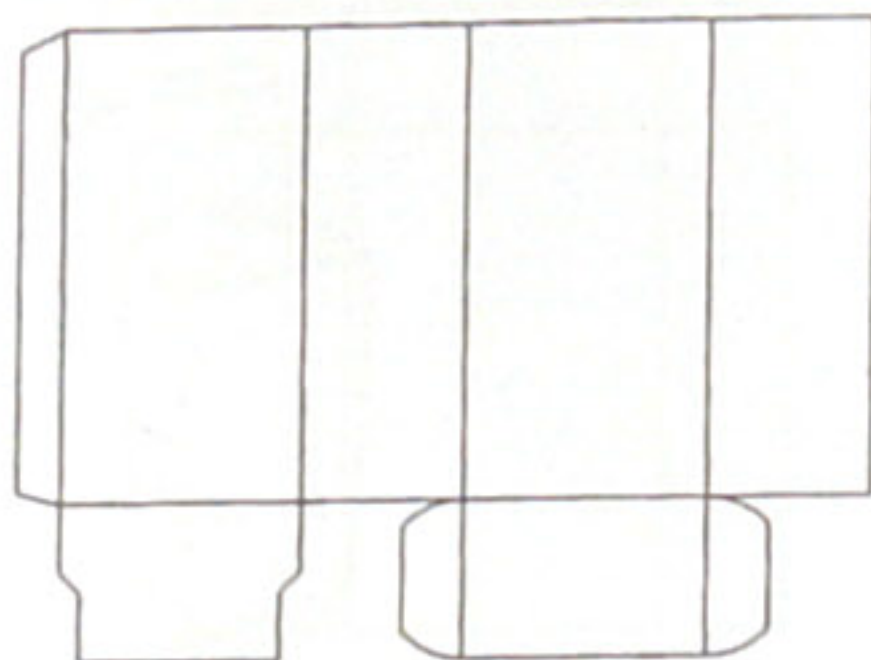
A 2420



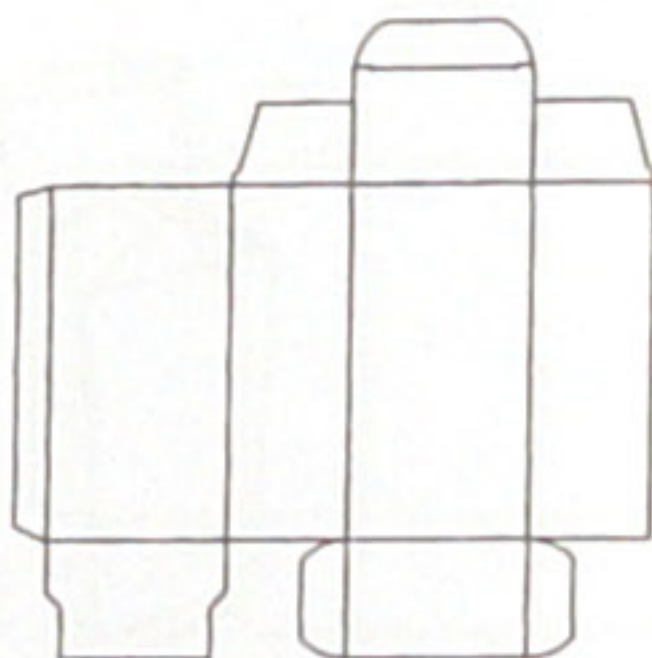
A 3001



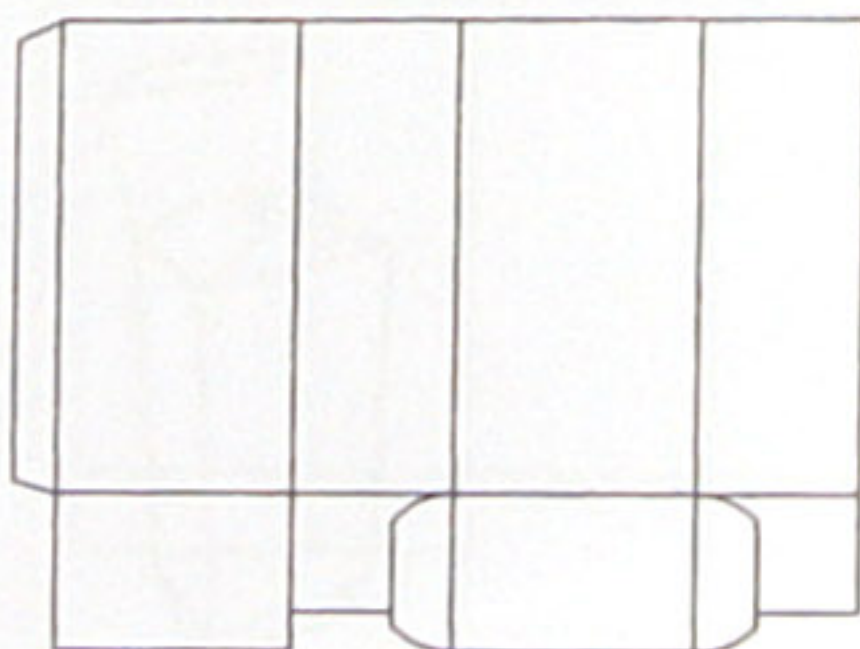
A 4001

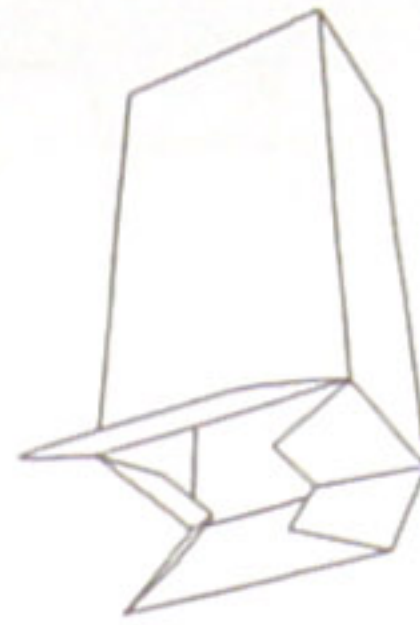
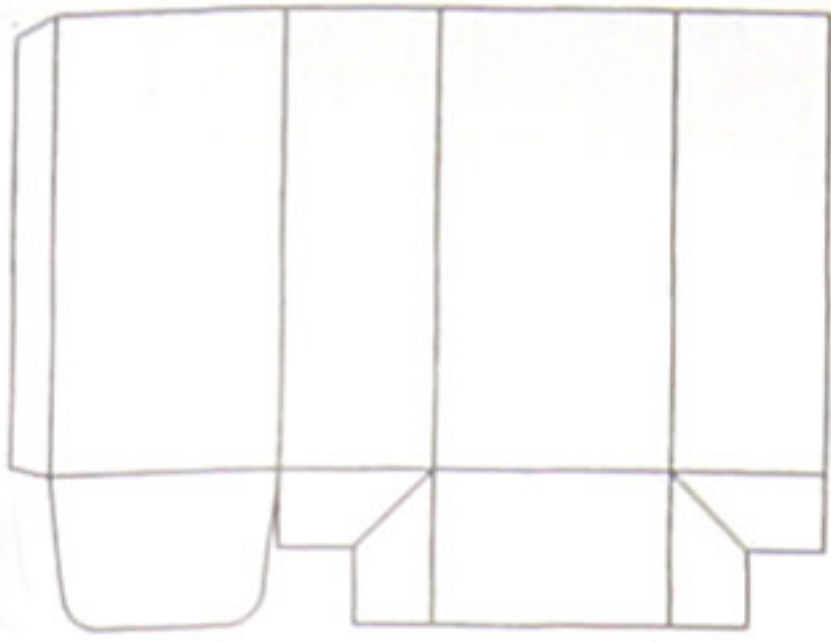


A 4020

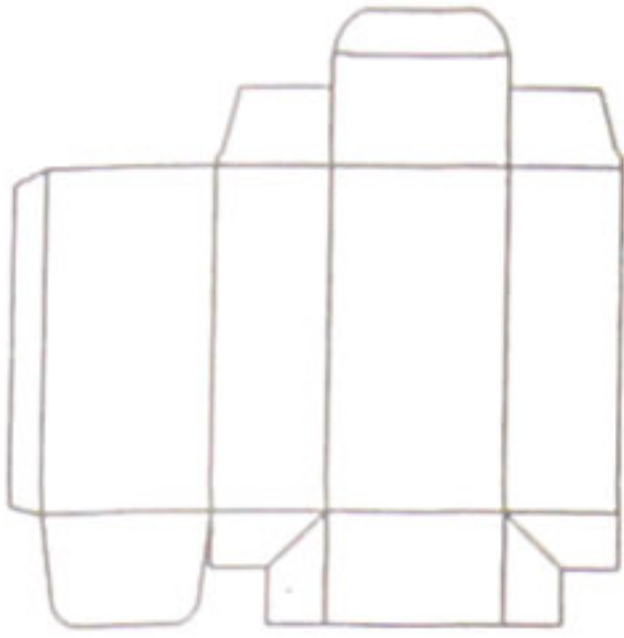


A 4101

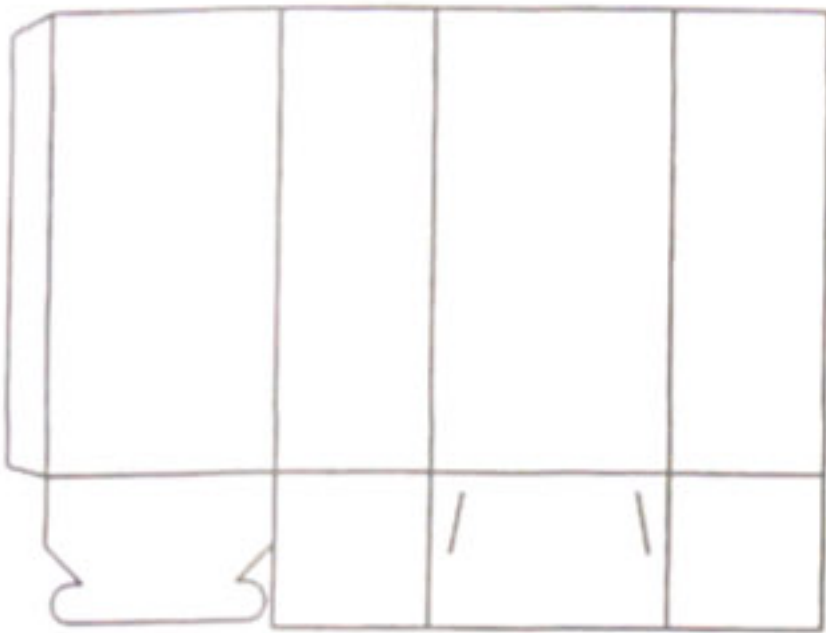




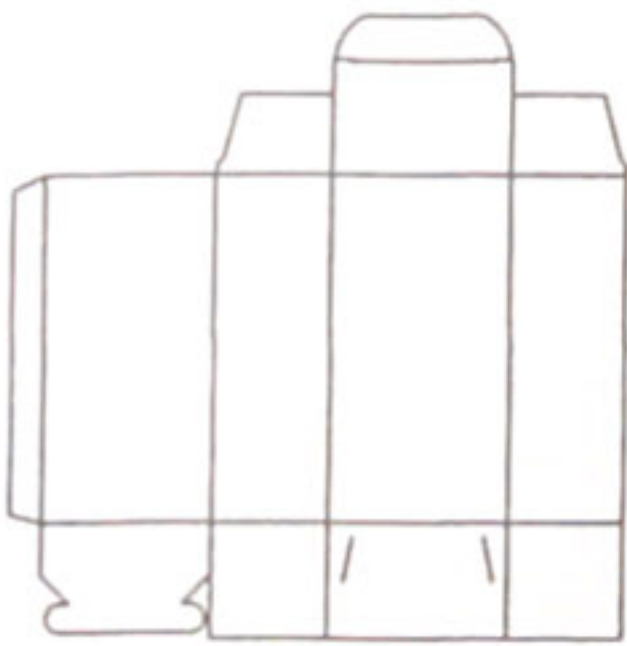
A 4501



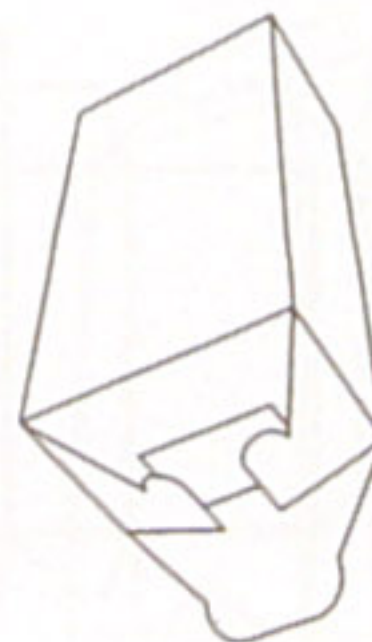
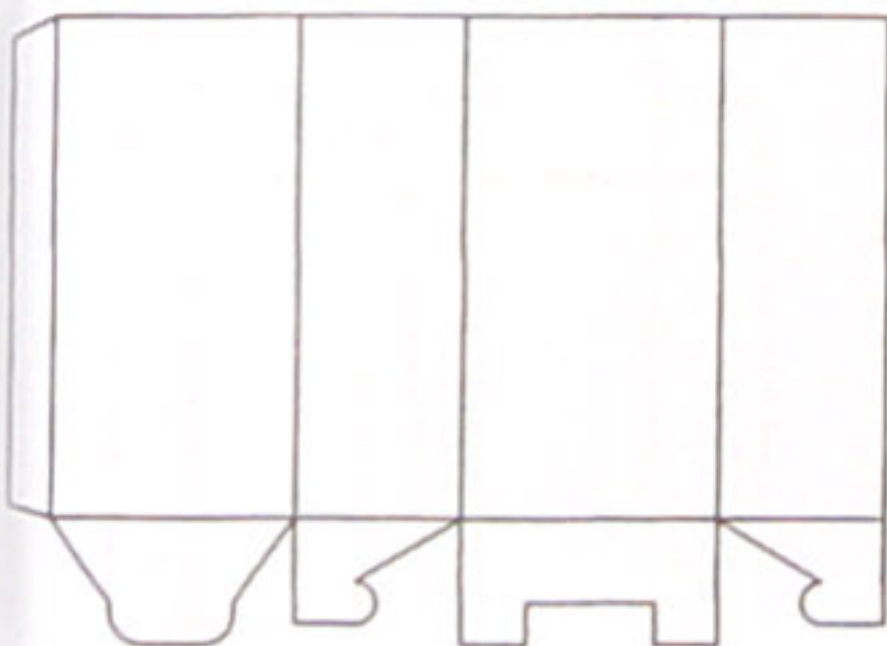
A 4520



A 5001

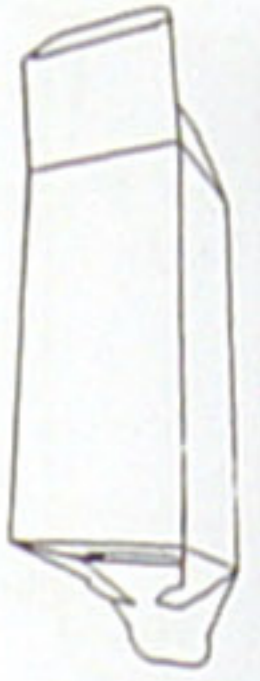
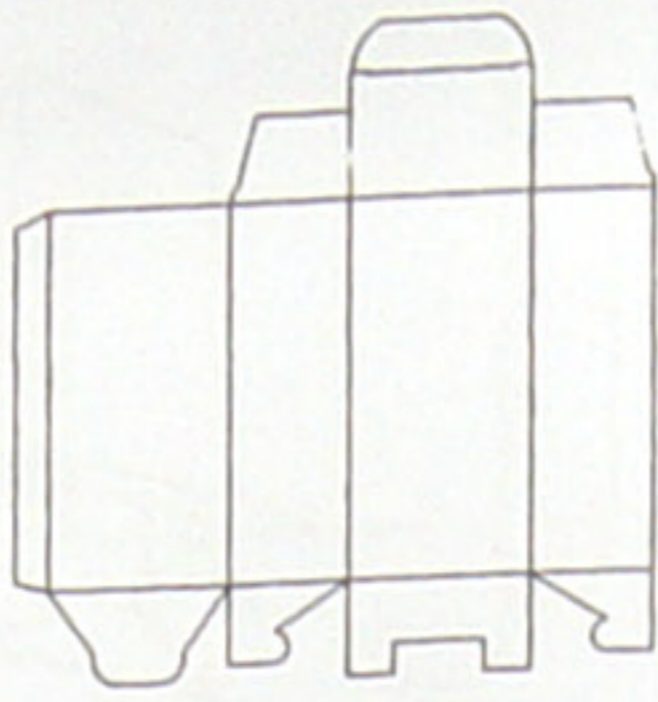


A 5020

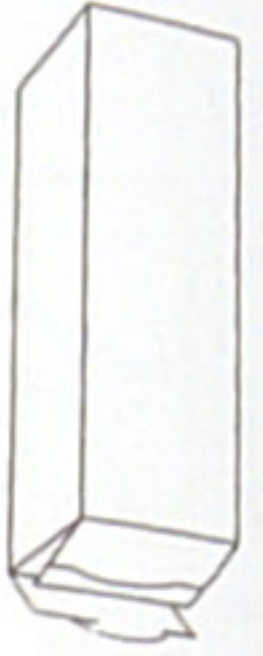
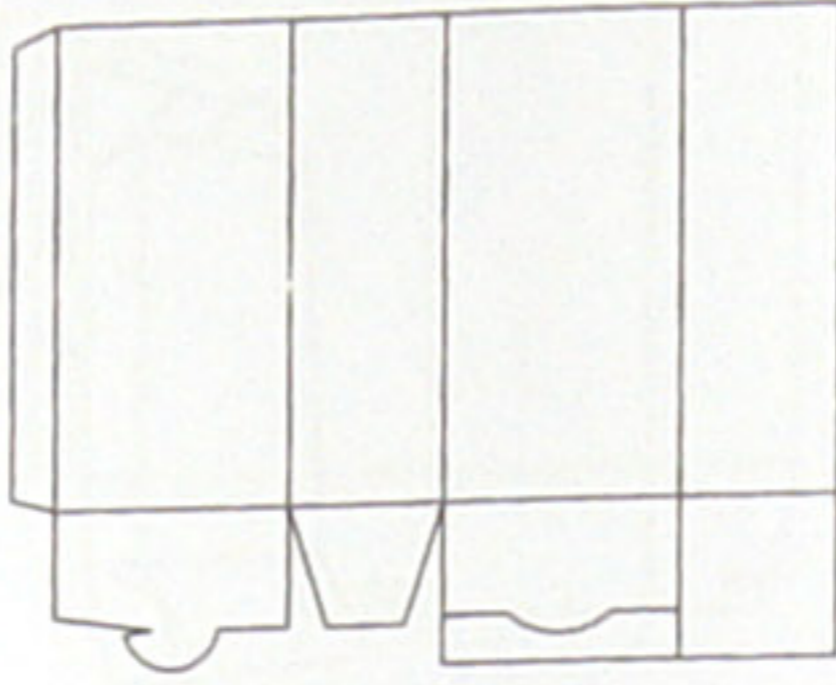


A 5501

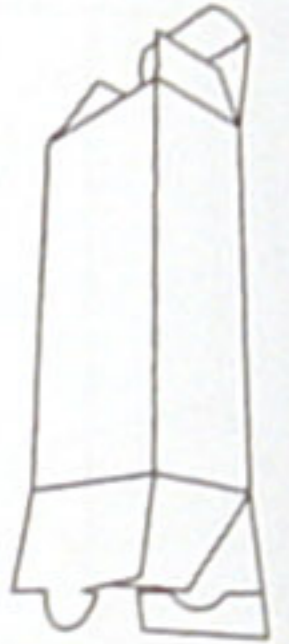
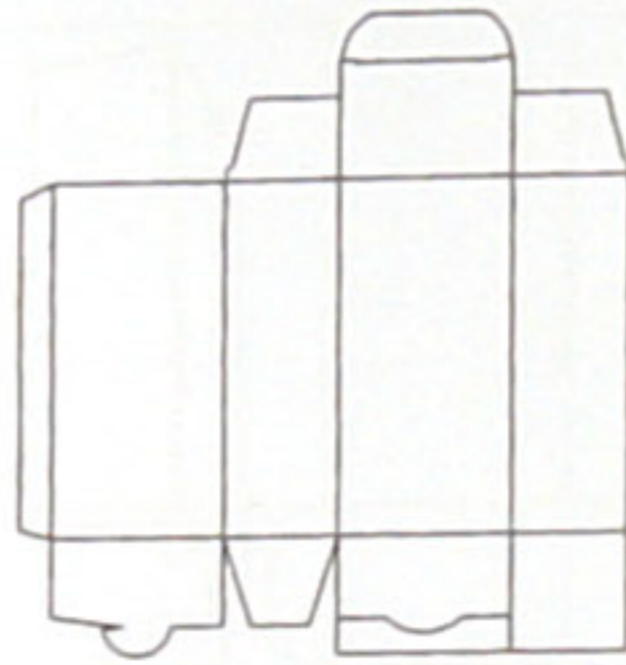
**A 5520**



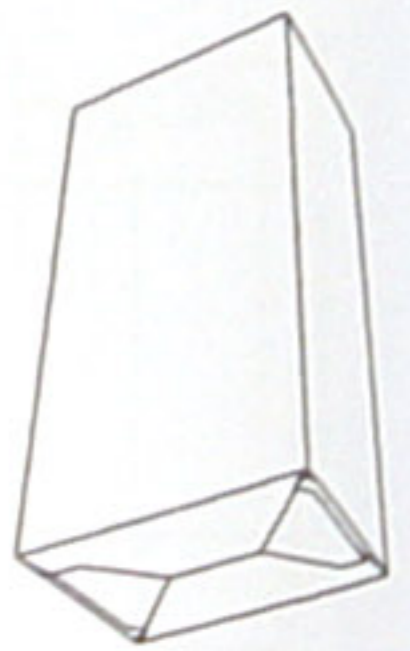
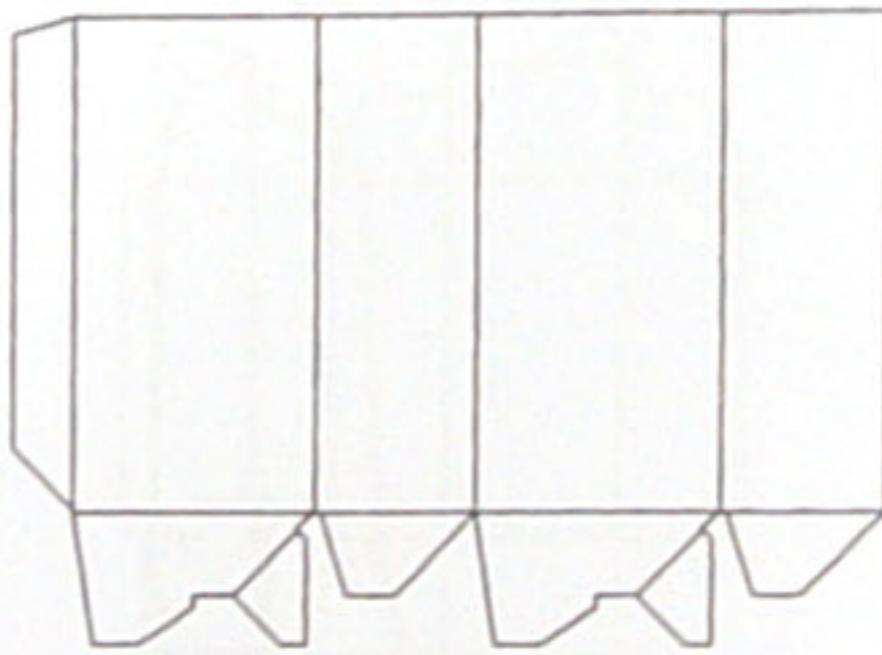
**A 5601**



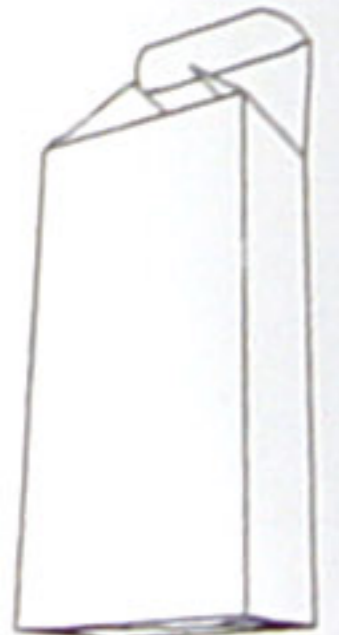
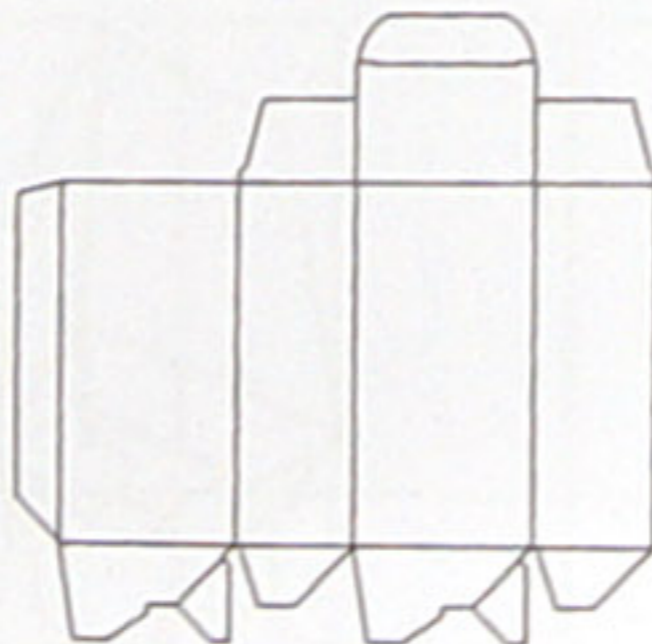
**A 5620**

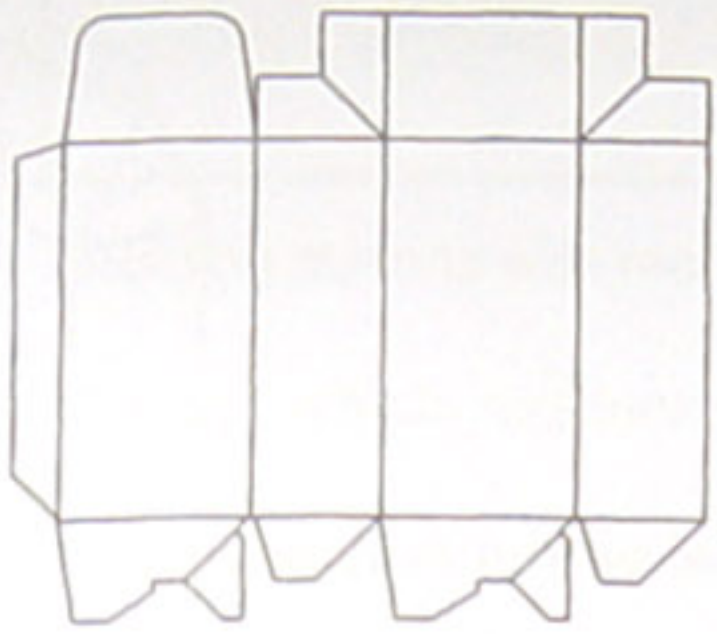


**A 6001**

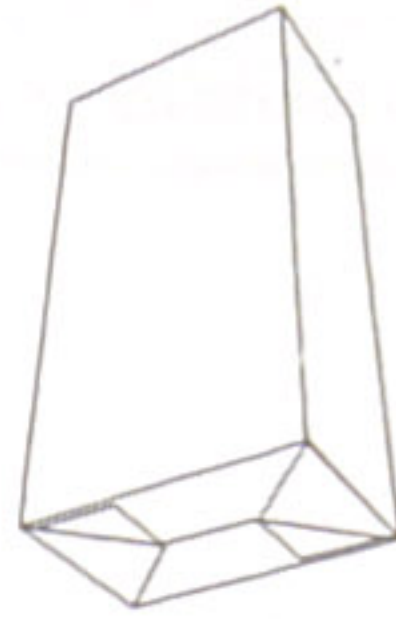
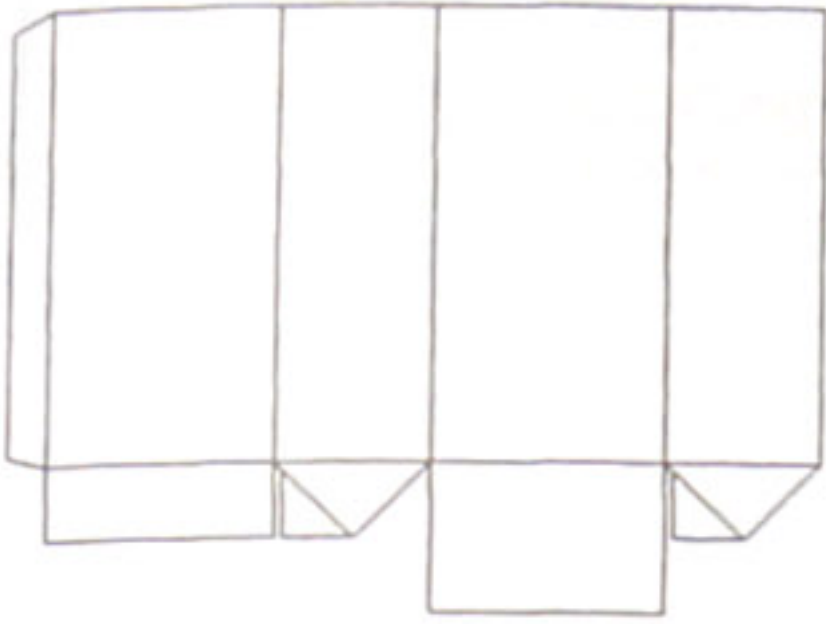


**A 6020**

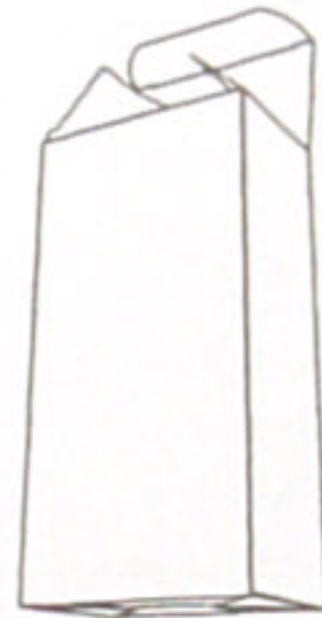
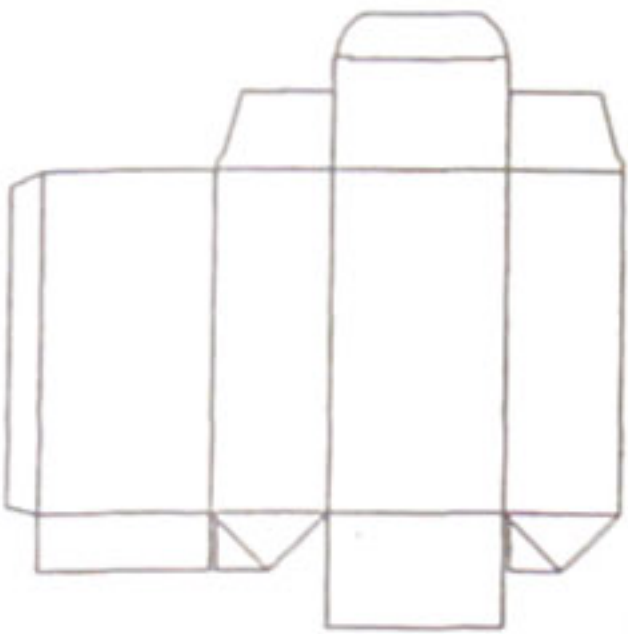




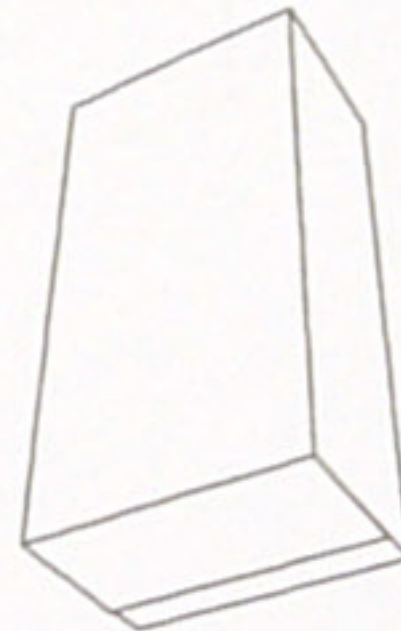
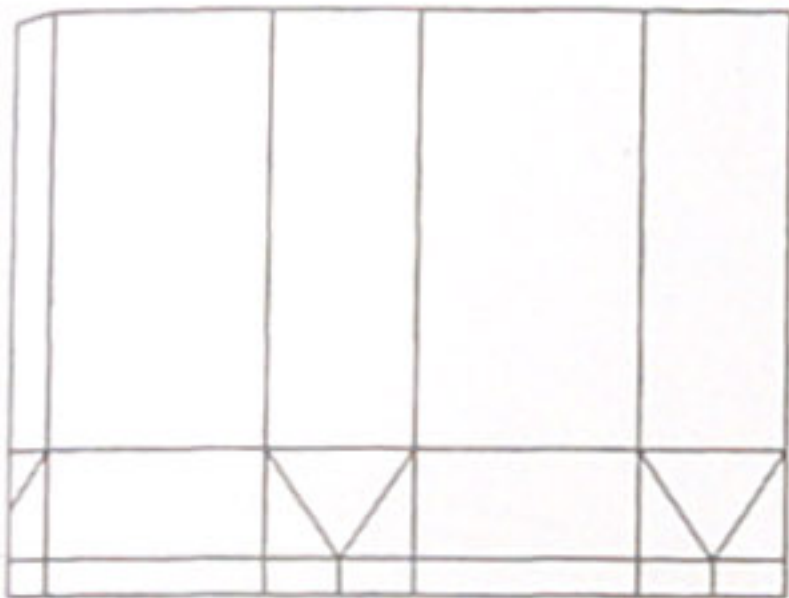
A 6045



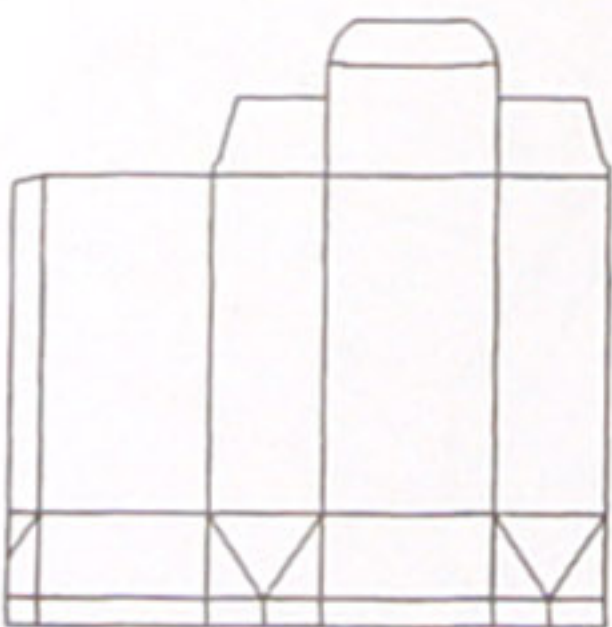
A 6101



A 6120

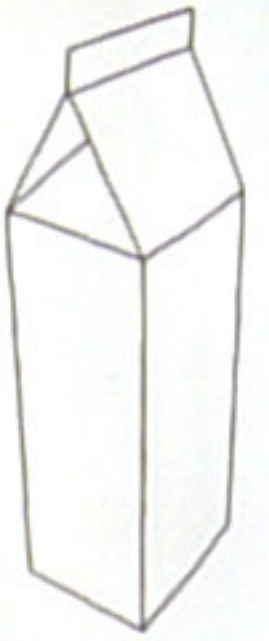
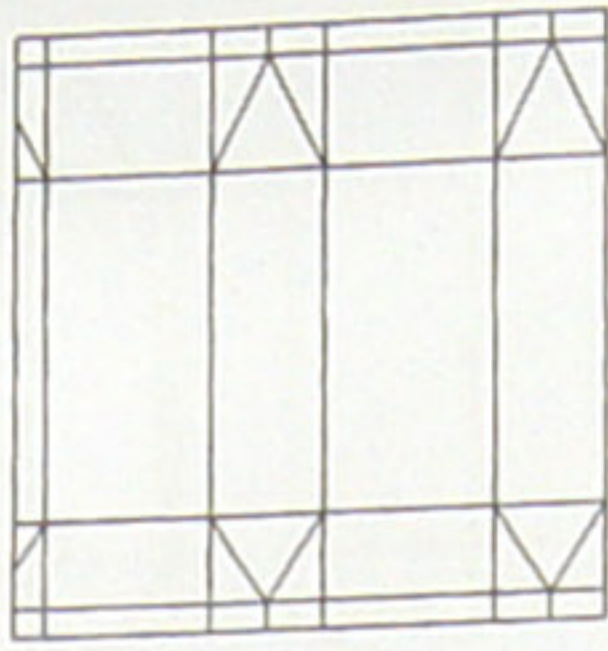


A 7001

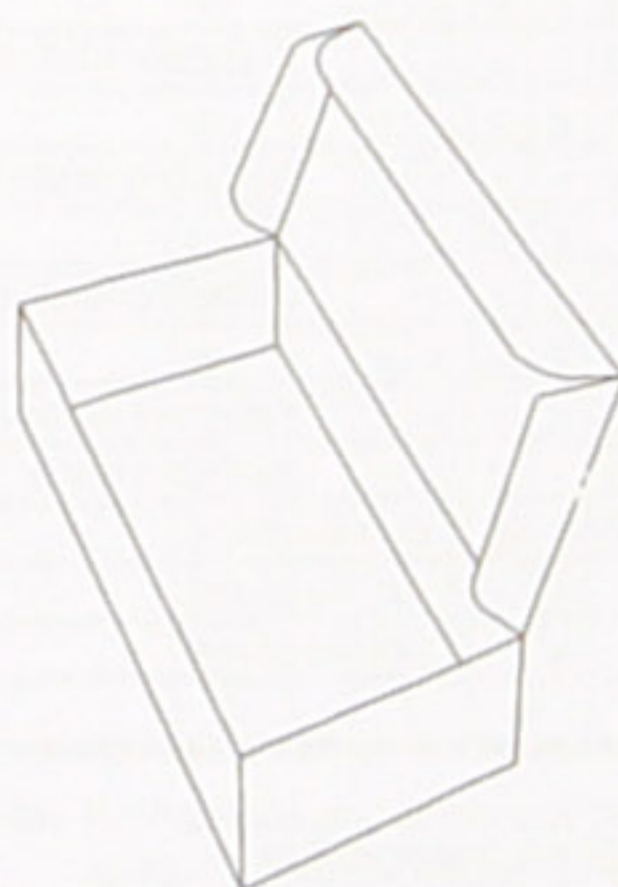
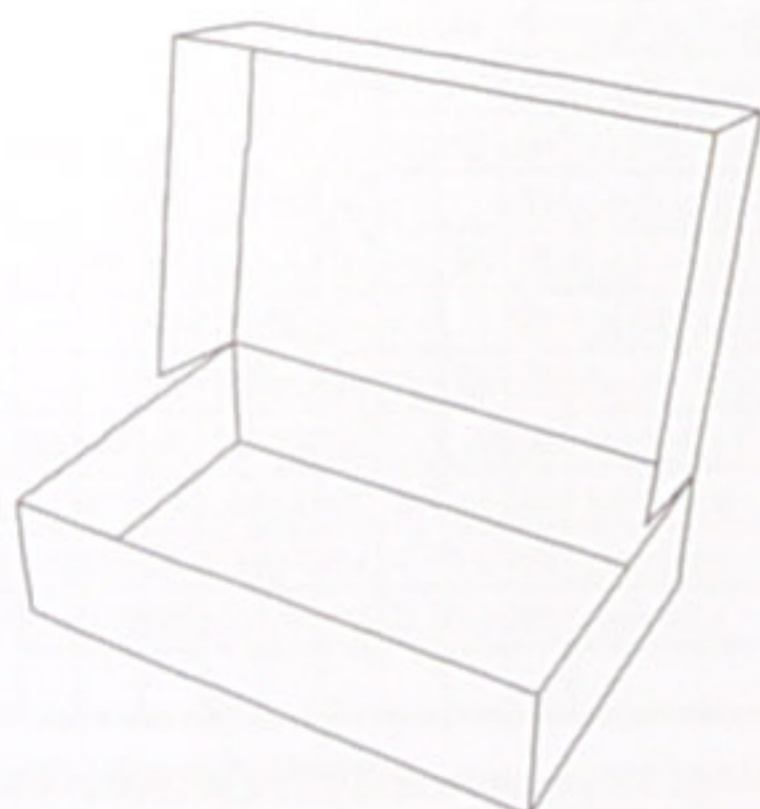
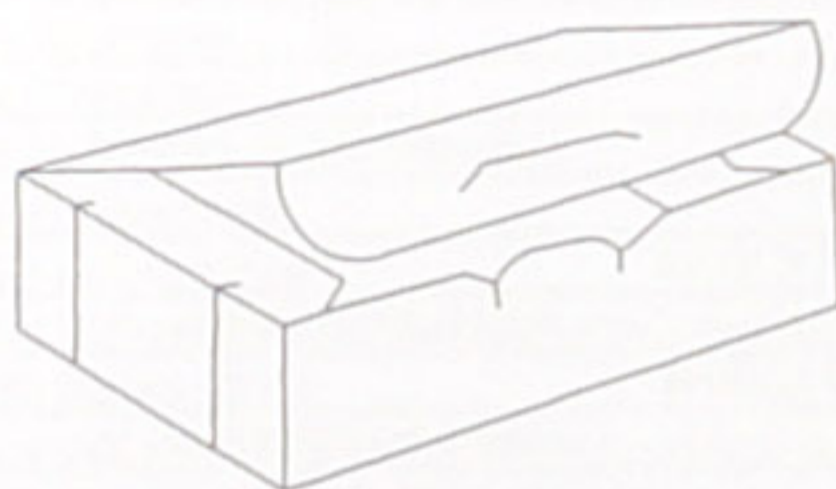
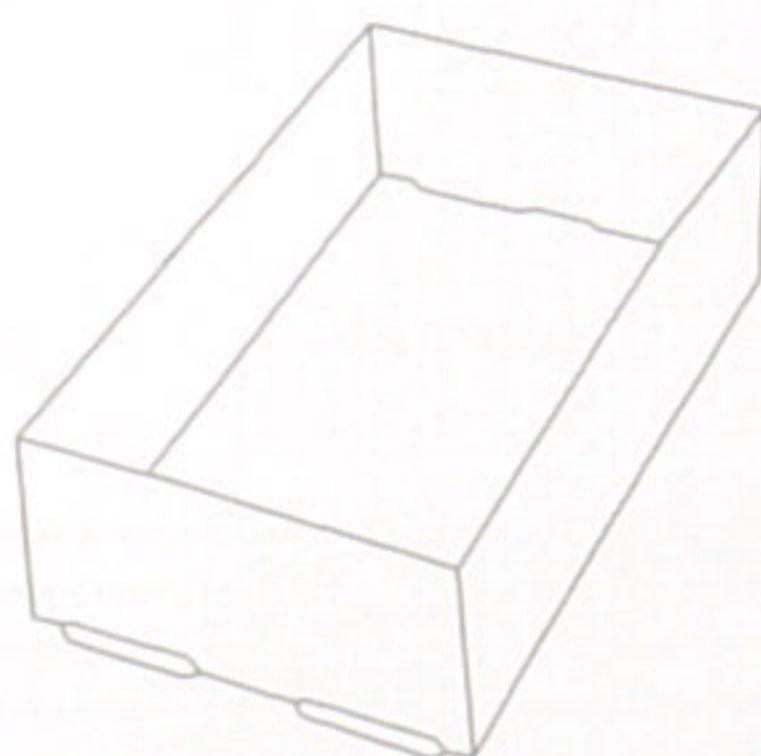
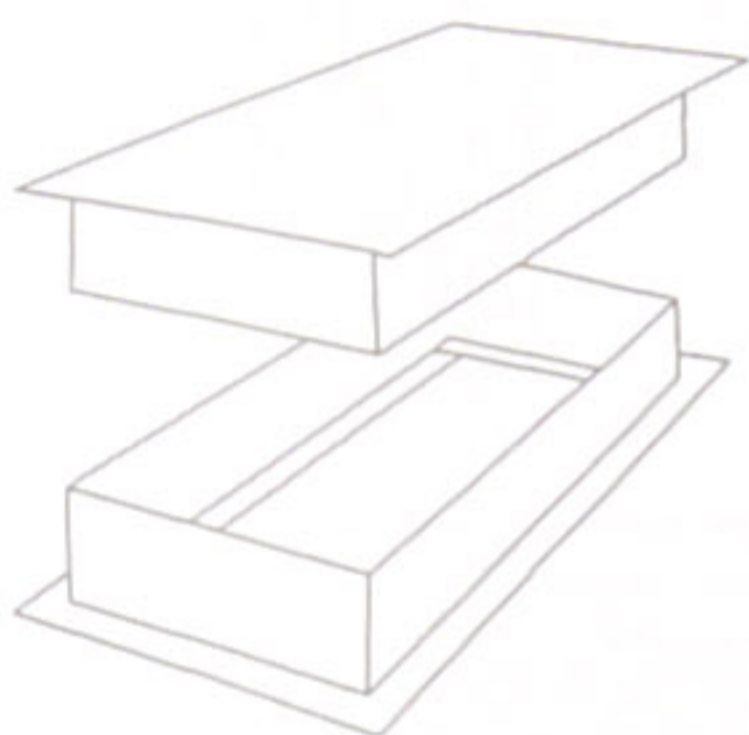


A 7020

A 7070



- B Folding cartons with rectangular surfaces, non-long seam glued
- B Faltschachteln rechteckig ohne Längsnahtklebung, gefaltet
- B Boîtes pliantes aux surfaces rectangulaires sans patte de collage latérale, pliées
- B Cajas plegables de superficies rectangulares sin solapa de encolado lateral
- B Scatole pieghevoli rettangolari (senza lembo d'incollatura laterale)



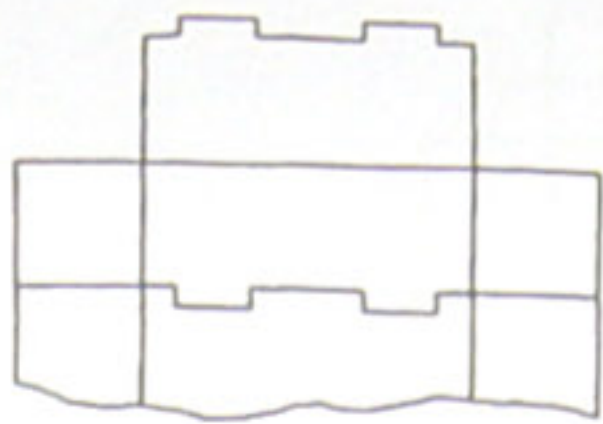


		Lid/Flap										
		Basic Shape	in one part	in two parts	type of locking flap	not glued, not webbed	webbed corners	pre-glued, not webbed	webbed corners	tuck-in flap	2 flap lid	3 flap lid
		-	-	01	10	11	20	21	50	52	53	60
10	tray with 4 double walls	●	●		X	X	X	X				
11	locking corners	●	●		X	X	X	X				
12	sloping side panels	●	●					X				
13	integral flange base	●	●		X							
14	buffer walls	●			X	X	X	X				
20	fold over end with nib locks, 4 double walls	●	●	a	X	X	X	X				
21	fold over end with nib locks, 2 double walls	●	●	a	X	X			●	●		
22		●	●	b	X	X			●	●		
23		●	●	c	X	X			●	●		
24	bellows corners outfold	●	●	d		X			●	●		
30	tray with scissor lock ends	●	●	e	X				●	●		
31	2 hooks, single walled at sides	●	●	f	X				●	●	●	●
32	dust flaps locked in	●		g	X				●	●		
33	4 hooks, single walled at sides	●	●	f	X				●	●	●	●
34	dust flaps locked in	●		g	X				●	●		
35	rounded ends	●		g	X				●	●		
40	tray with 4-point glueing, 4 single-walled sides	●	●		X	X	X	X	●	●	●	●
41	dust flaps (number)	●			X	X	X	X	●	●	●	●
42	1 double walled side	●	●		X	X	X	X	●			
43	dust flaps (number)	●			X	X	X	X	●			
44	2 double walled ends	●	●		X	X	X	X	●	●		
45	dust flaps (number)	●			X	X	X	X	●			
46	3 double walled sides	●	●		X	X	X	X	●			
47	dust flaps (number)	●			X	X	X	X	●			
48	4 double walled sides	●	●		X	X	X	X				
49	rounded ends	●	●		X	X	X	X				
60	Box with flap lid 6 points glued	●			X	X	X	X	●	●		
61	4 points glued	●					X	X				
62	2 points glued	●					X	X				
		●						X				

X design  
 ● more combinations possible  
 □ present in the sketch

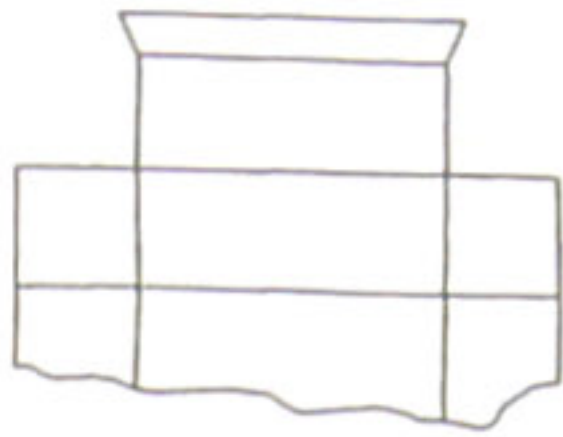
Warning: for patents and other protective rights see introduction page i 3, letter B.

For special designs from B see Group F20.



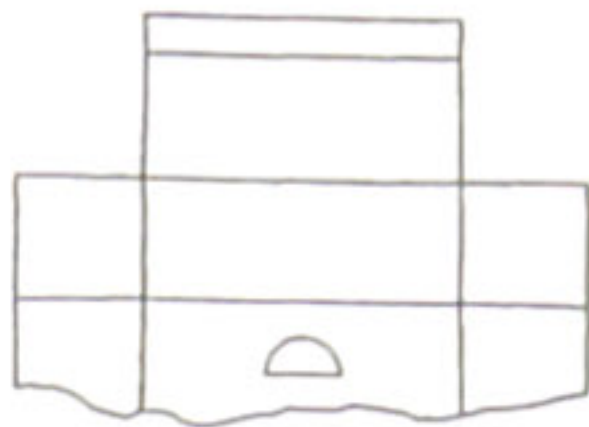
**a**

B 2001  
B 2101



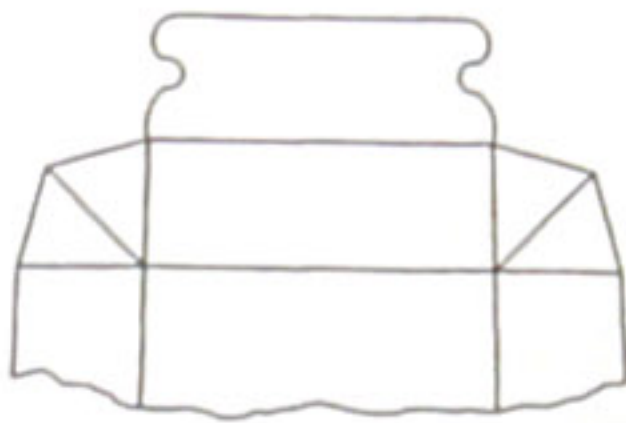
**b**

B 2201



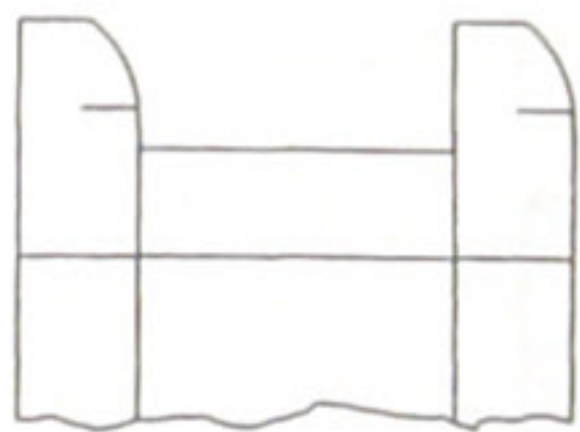
**c**

B 2301



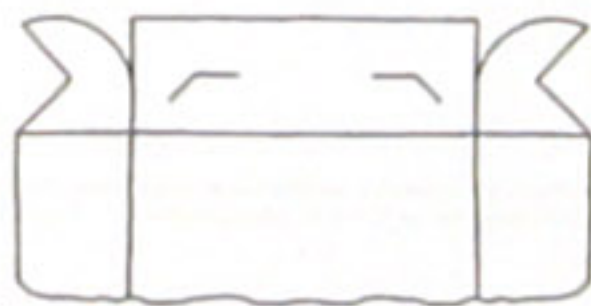
**d**

B 2401



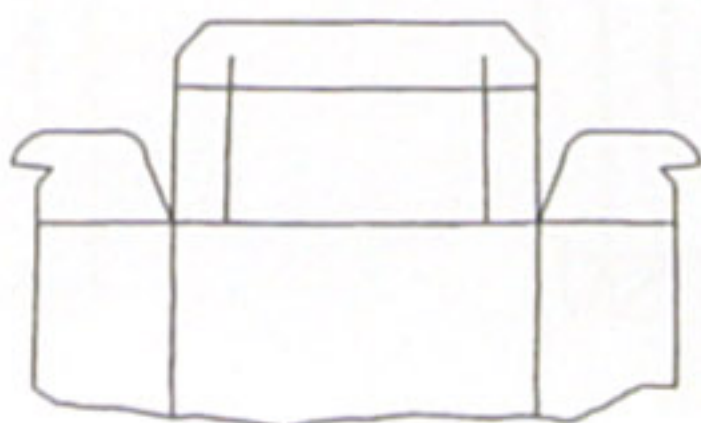
**e**

B 3001



**f**

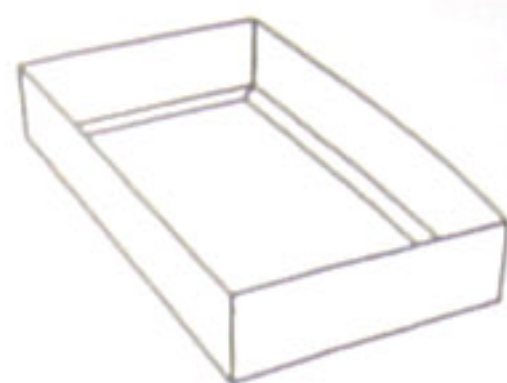
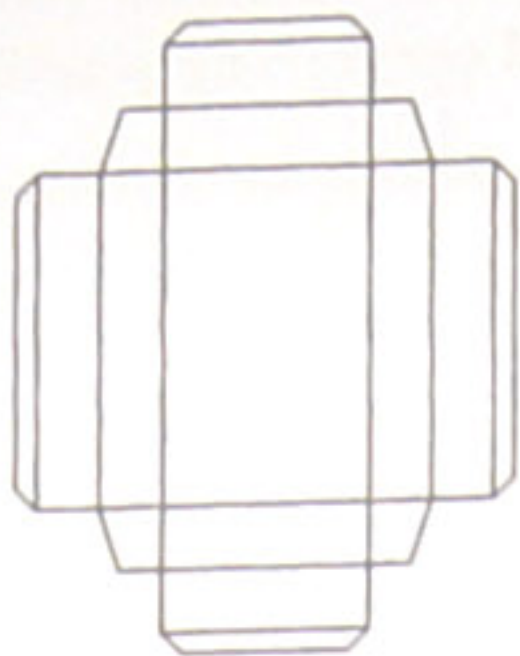
B 3101  
B 3301



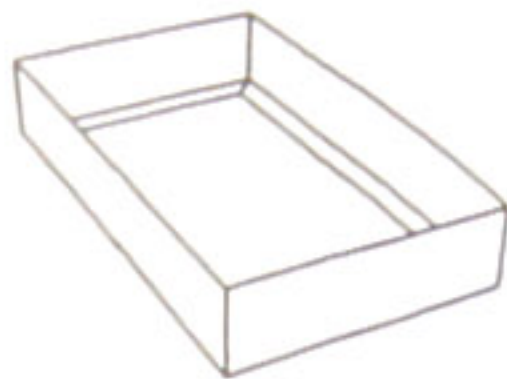
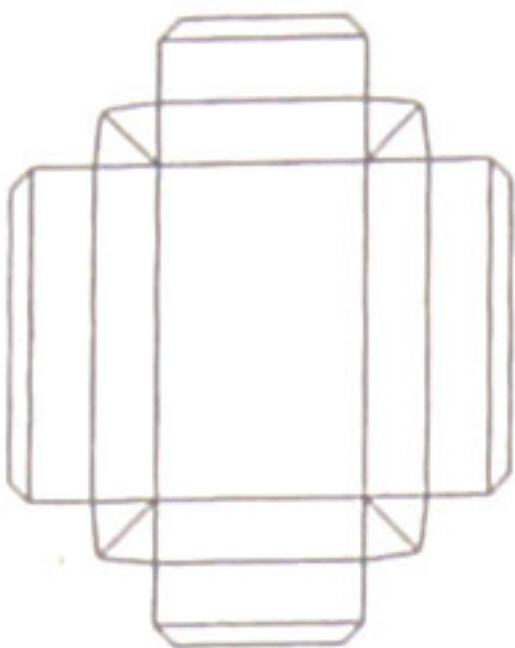
**g**

B 3201  
B 3401  
B 3501

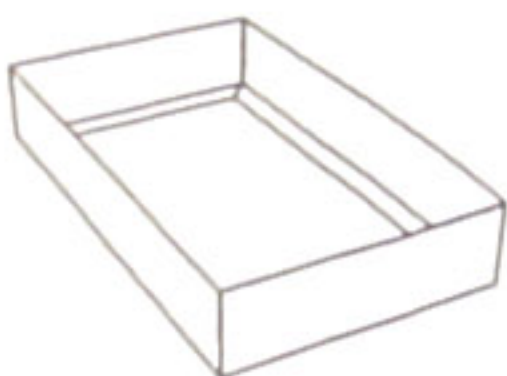
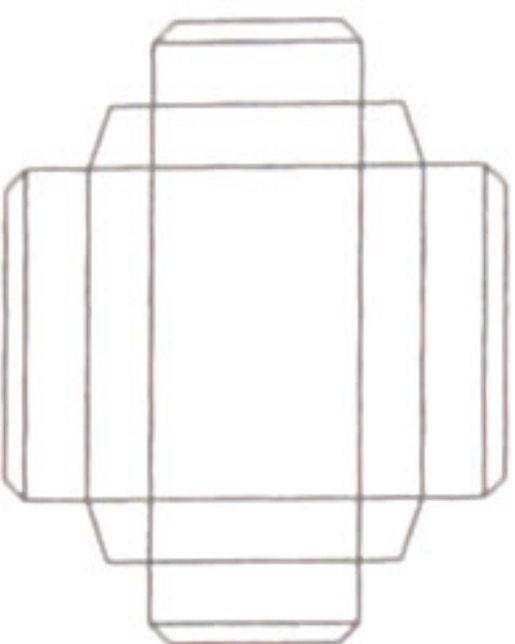
**B 1010**



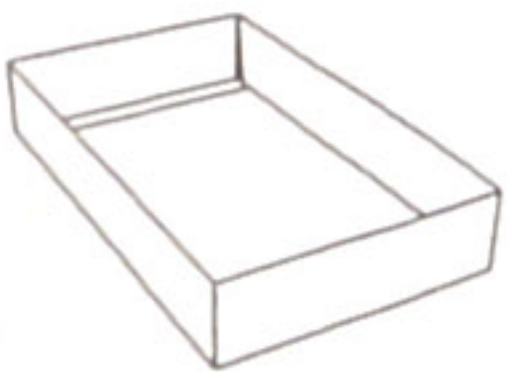
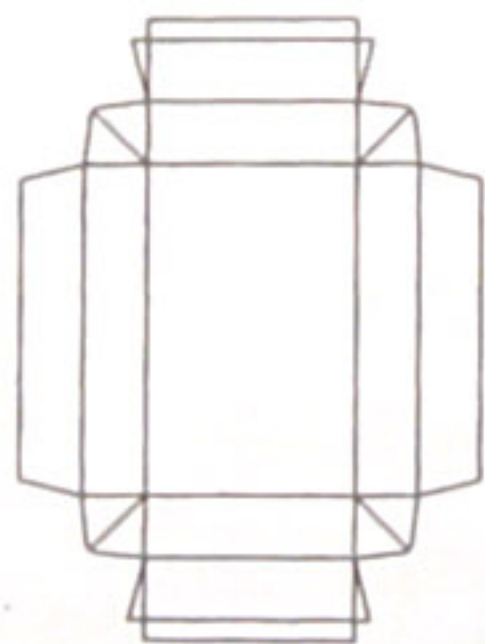
**B 1011**



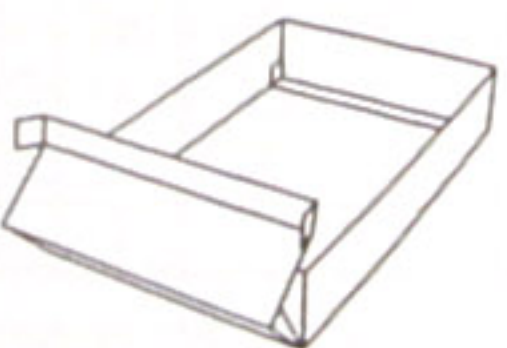
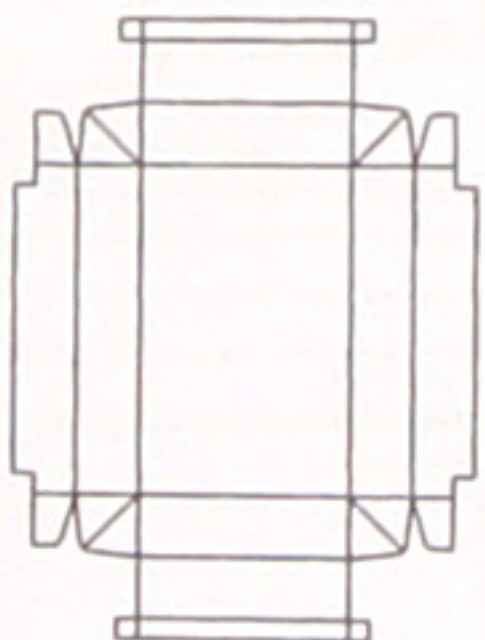
**B 1020**

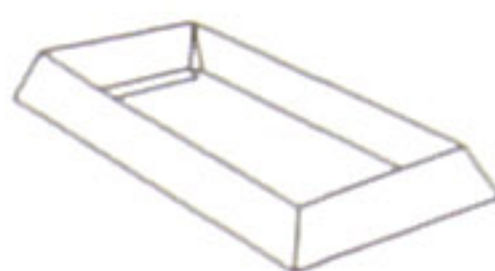
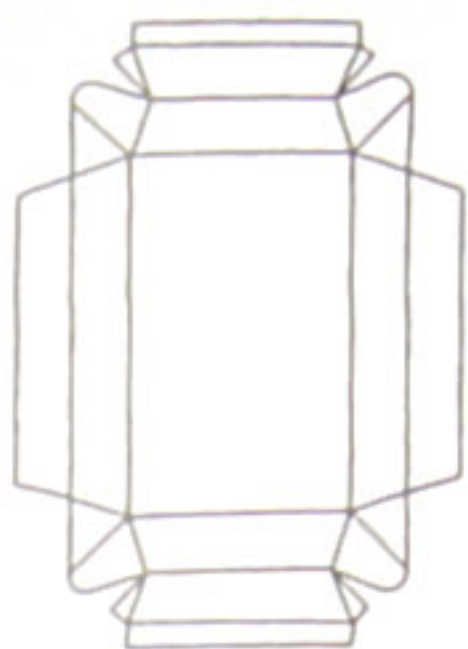


**B 1021**

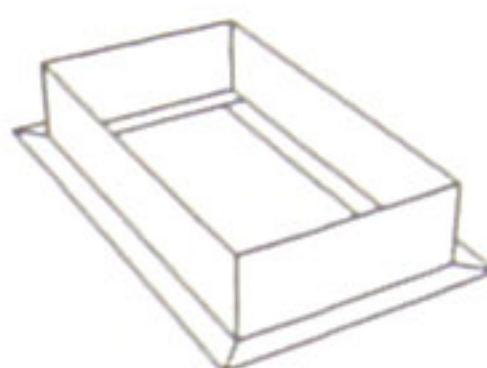
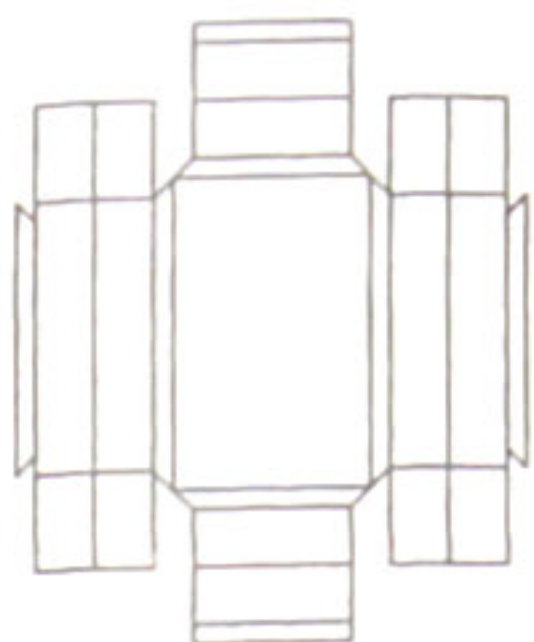


**B 1111**

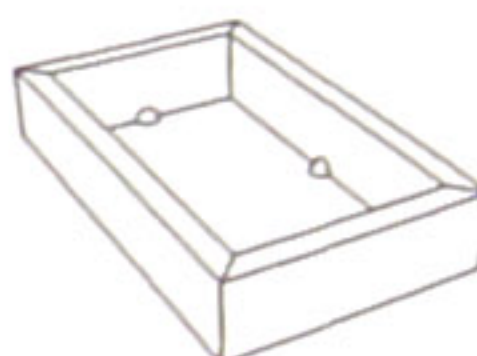
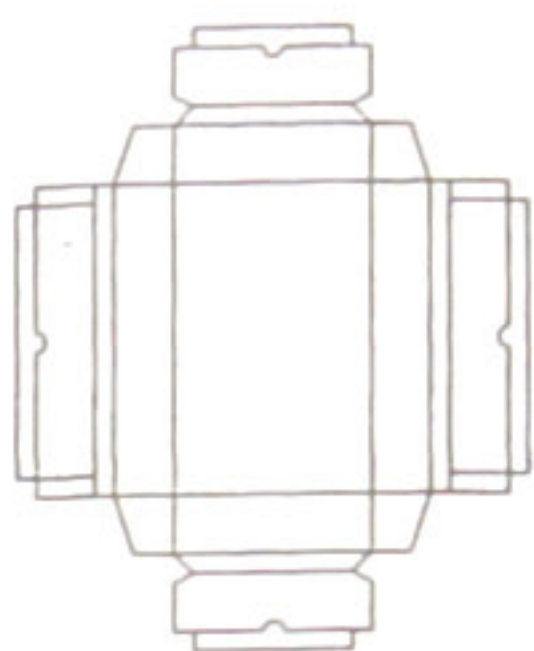




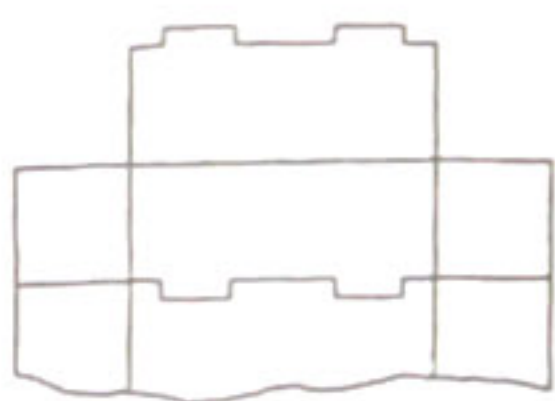
B 1221



B 1310

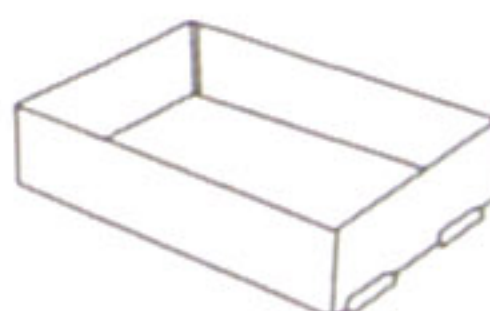
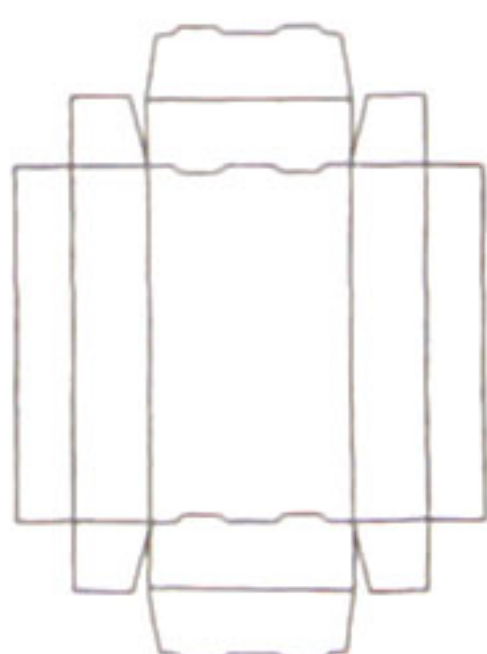


B 1410



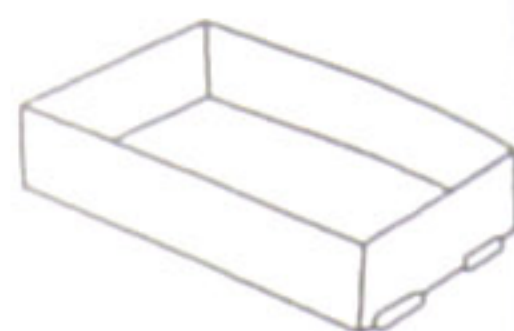
a

B 2001

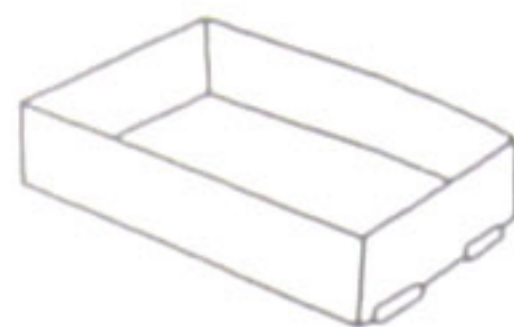
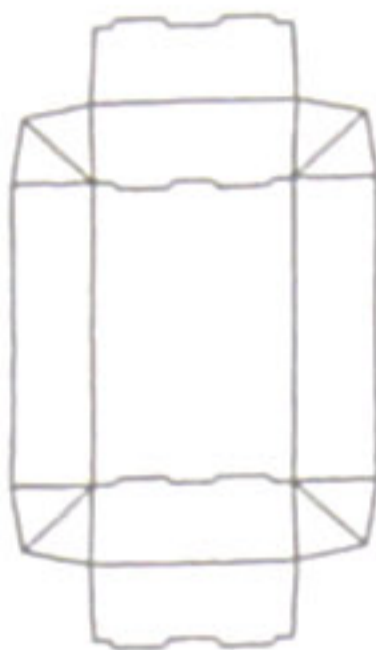


B 2020

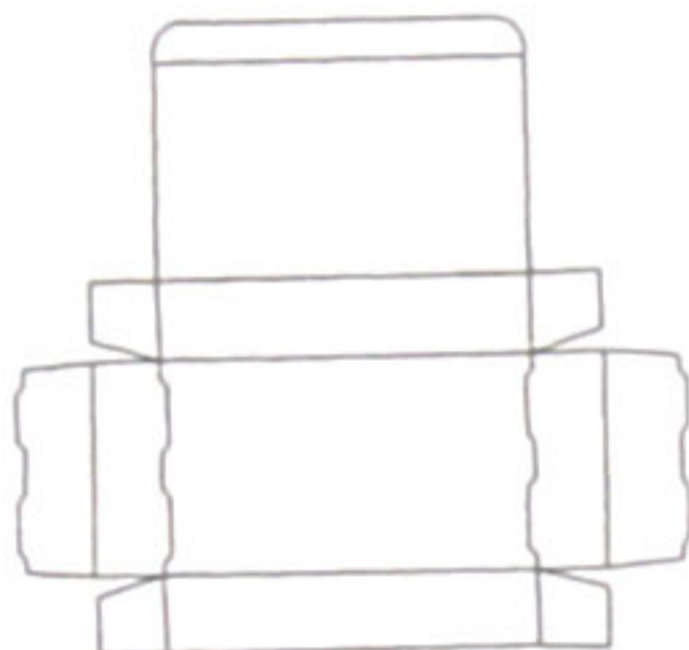
B 2110



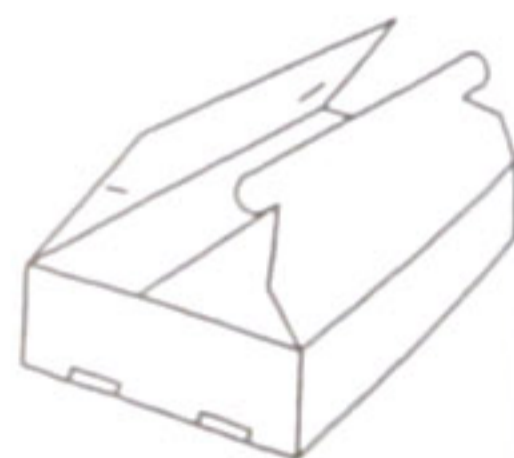
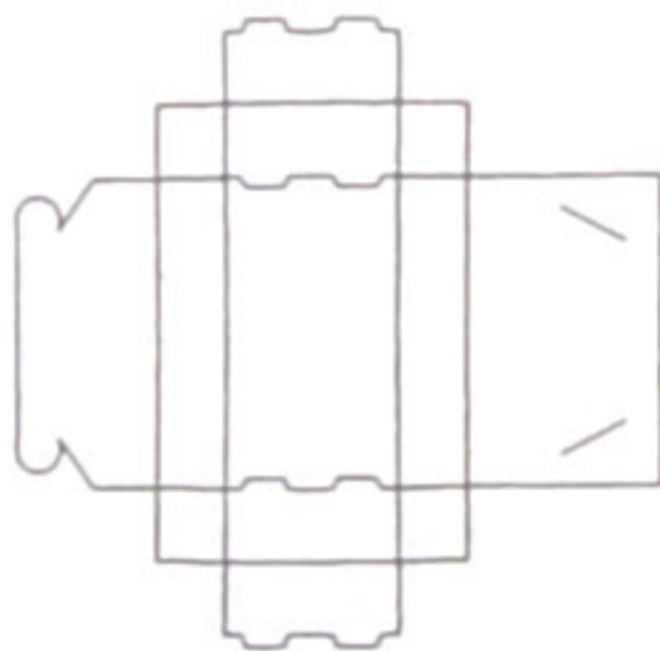
B 2111



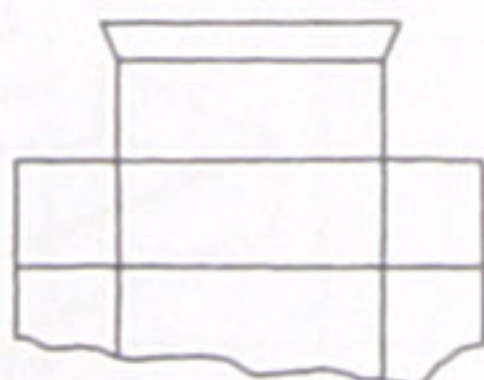
B 2150



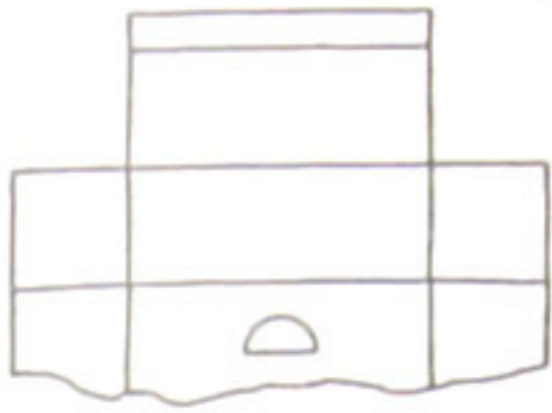
B 2152



B 2201

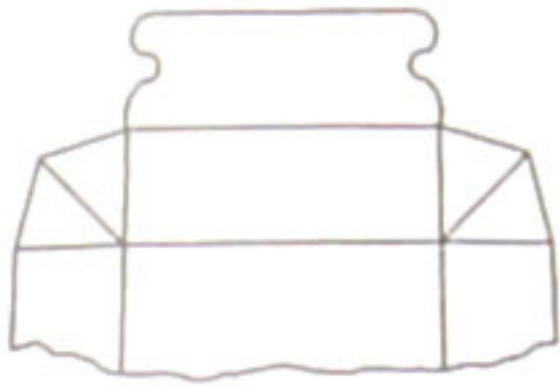


b



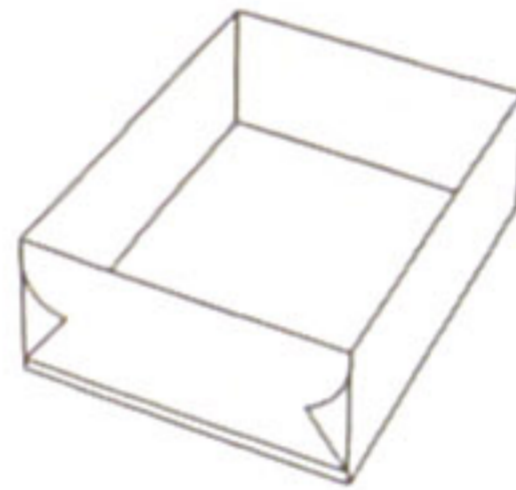
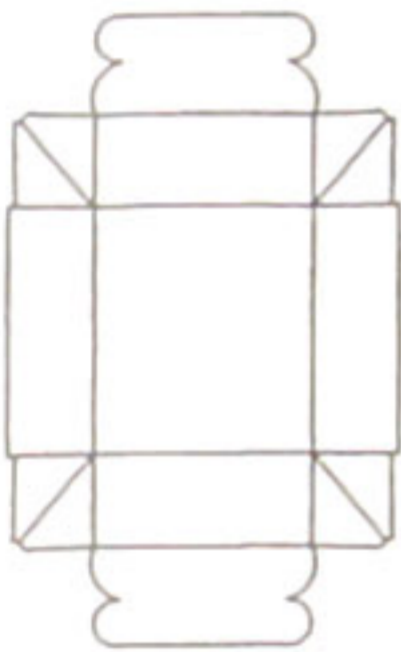
c

B 2301

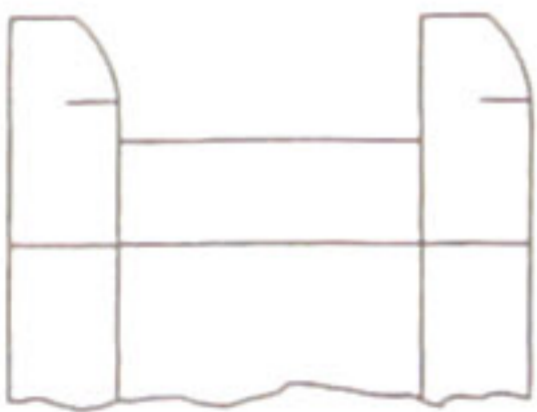


d

B 2401

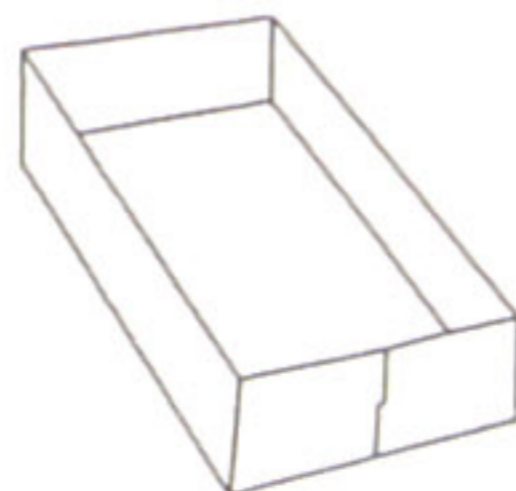
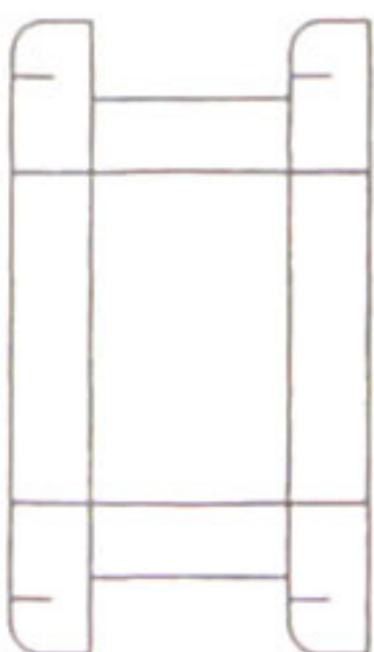


B 2411

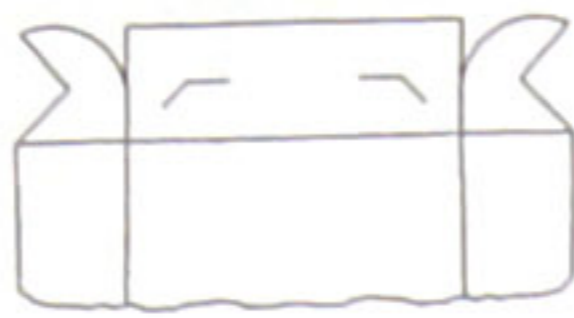


e

B 3001

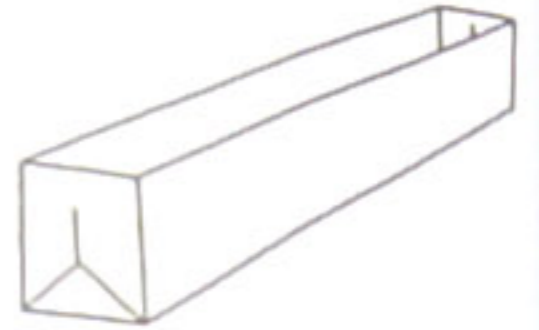
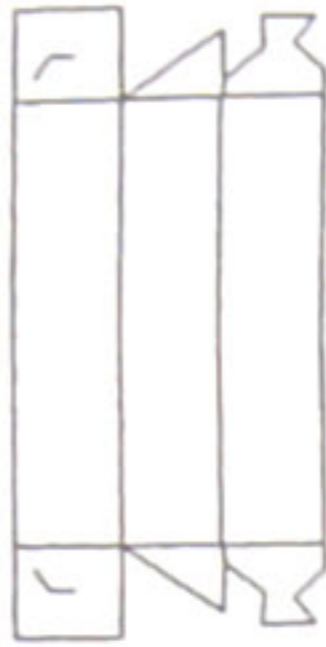


B 3010

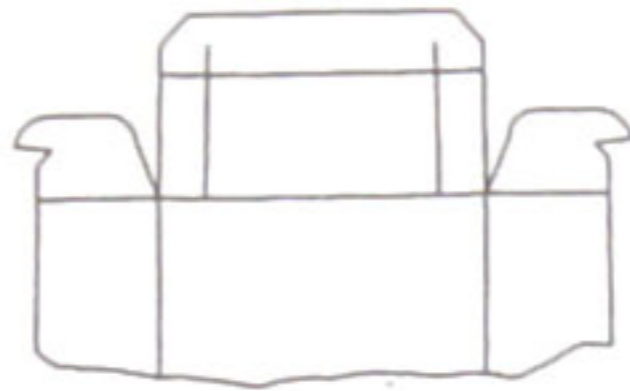


f

B 3101

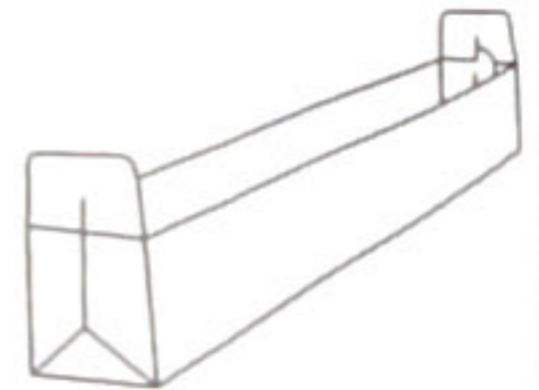
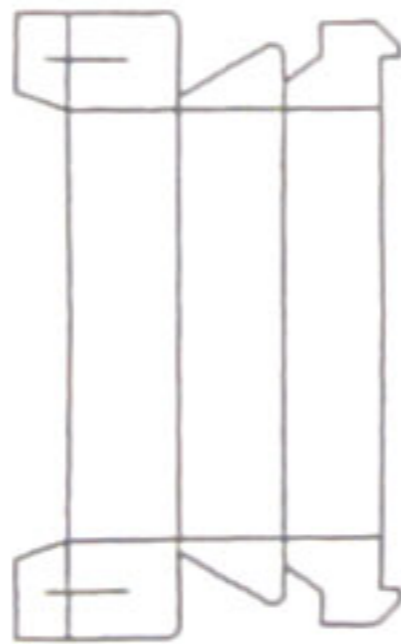


B 3110

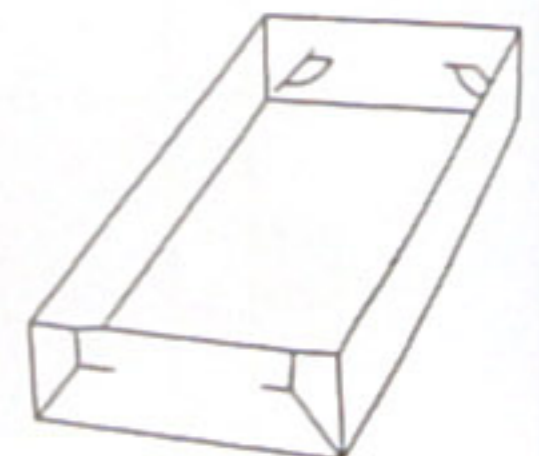
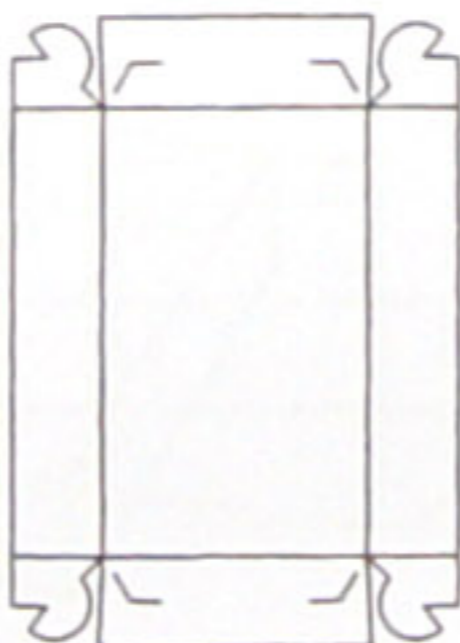


g

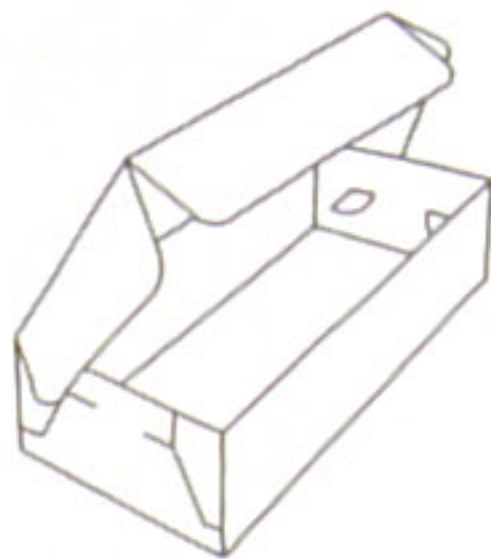
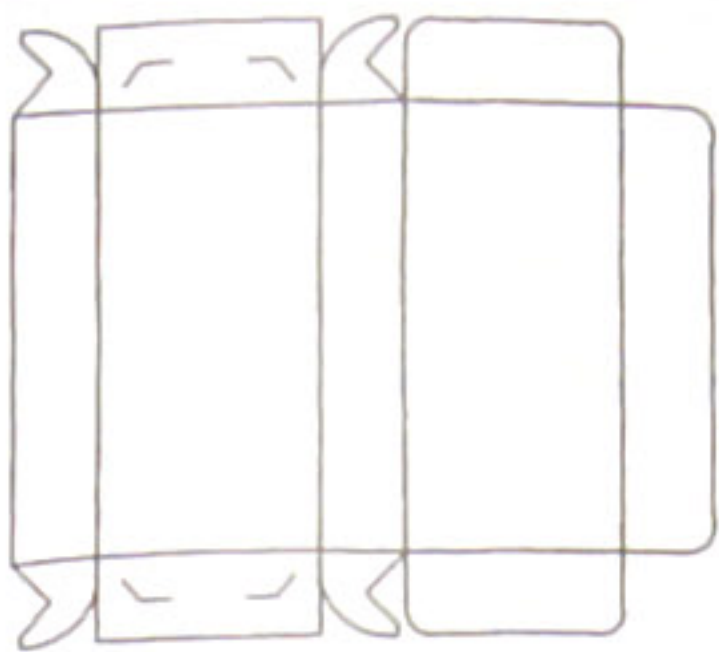
B 3201



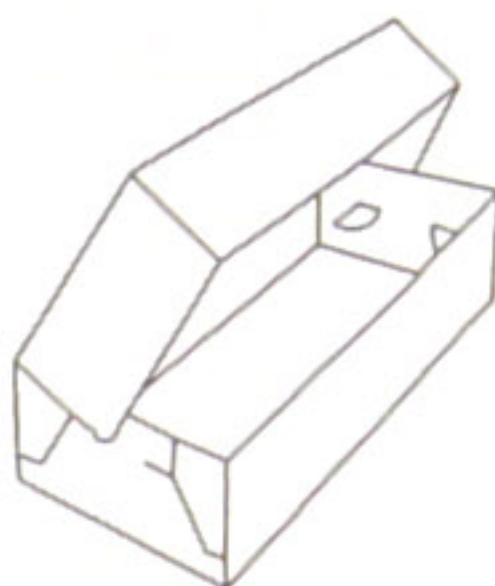
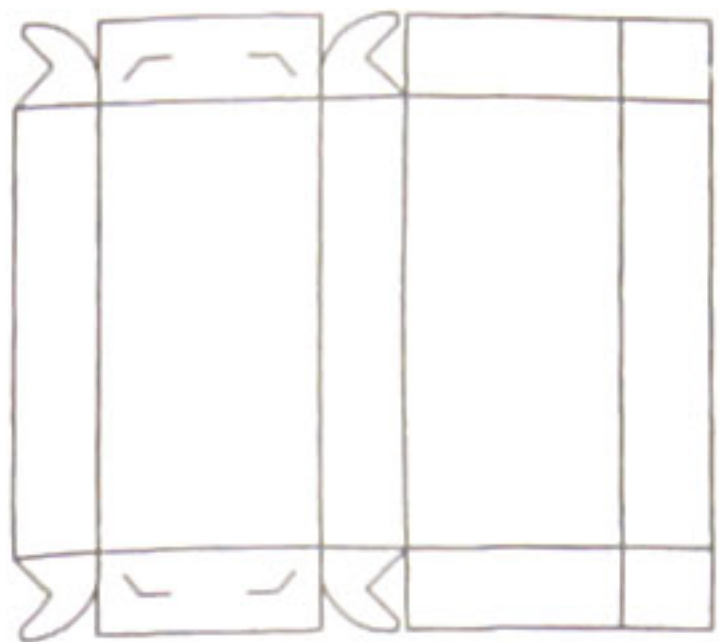
B 3210



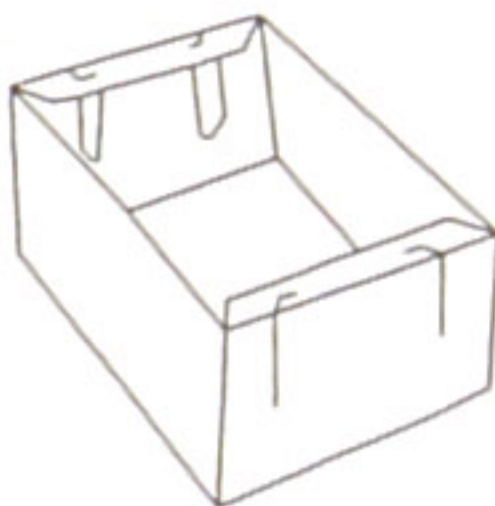
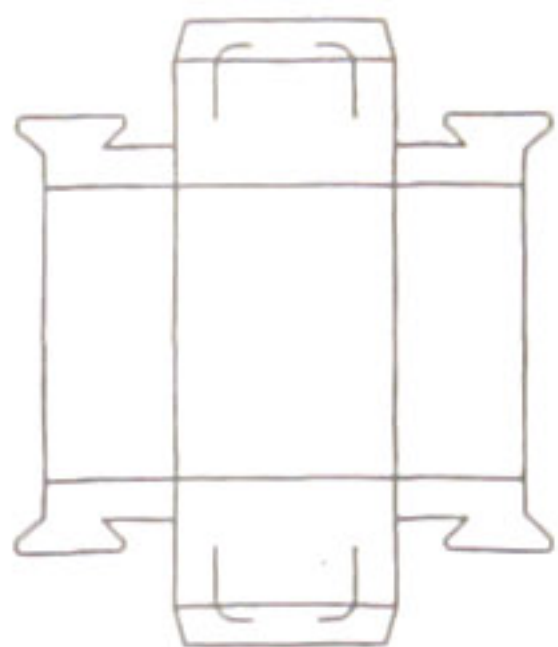
B 3310



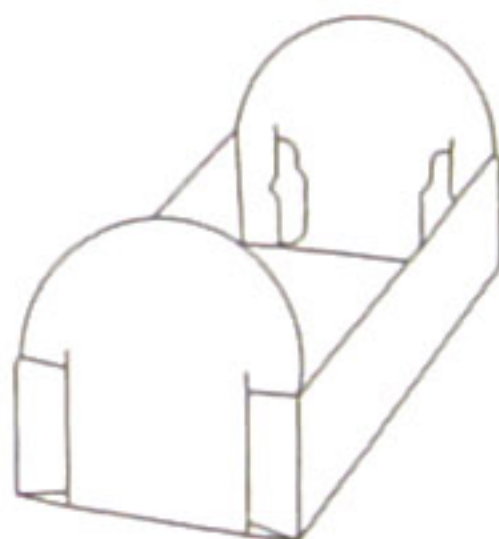
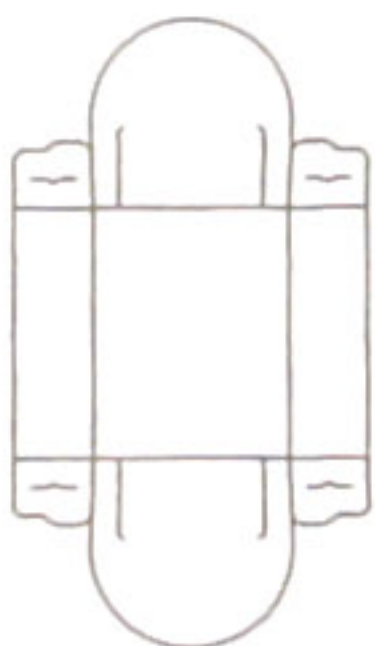
**B 3353**



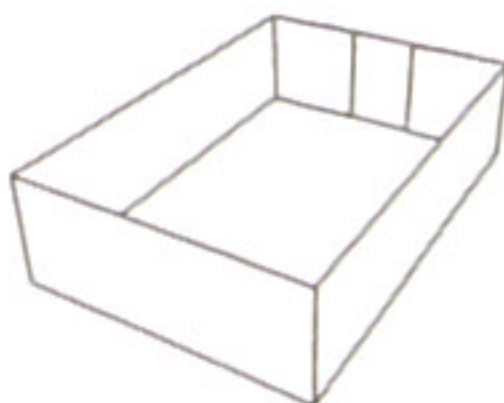
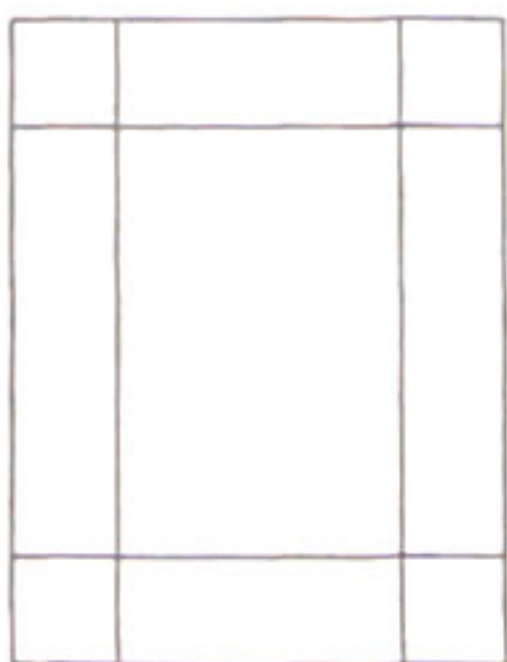
**B 3360**



**B 3410**



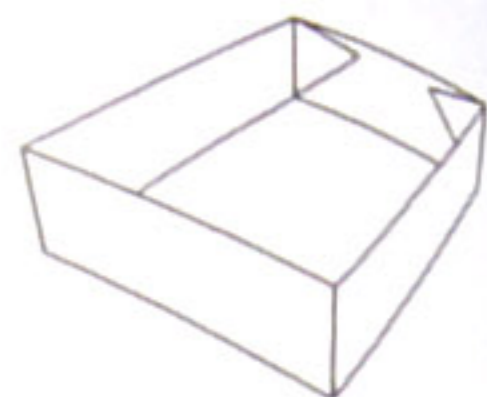
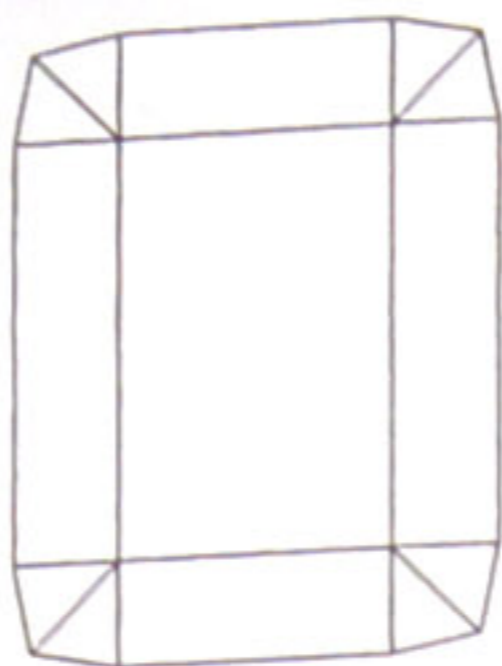
**B 3510**



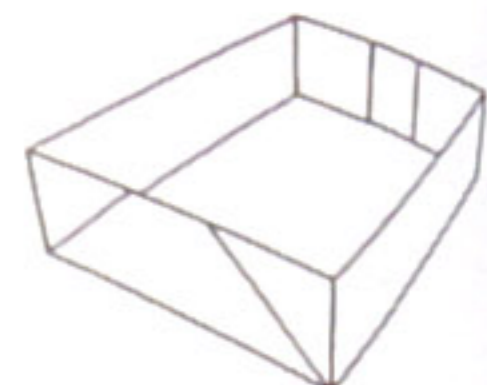
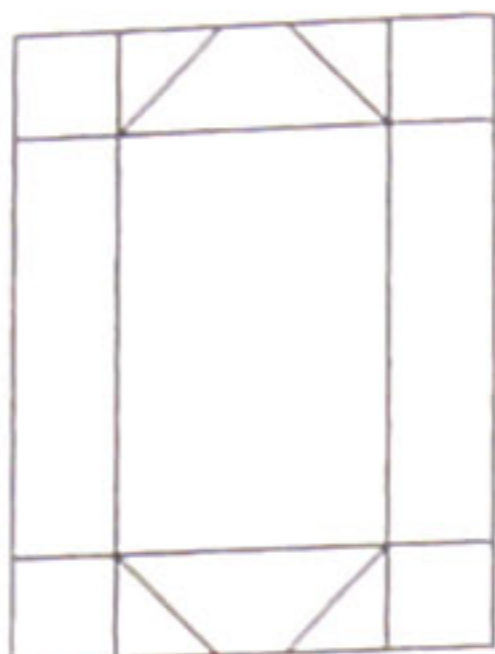
**B 4010**



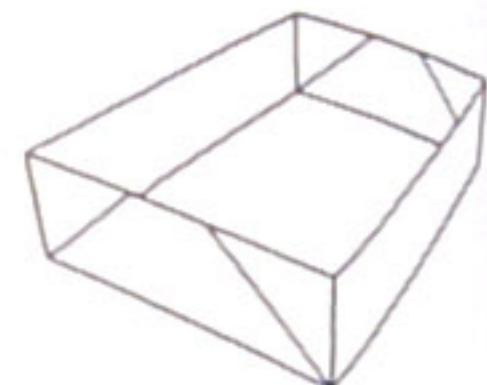
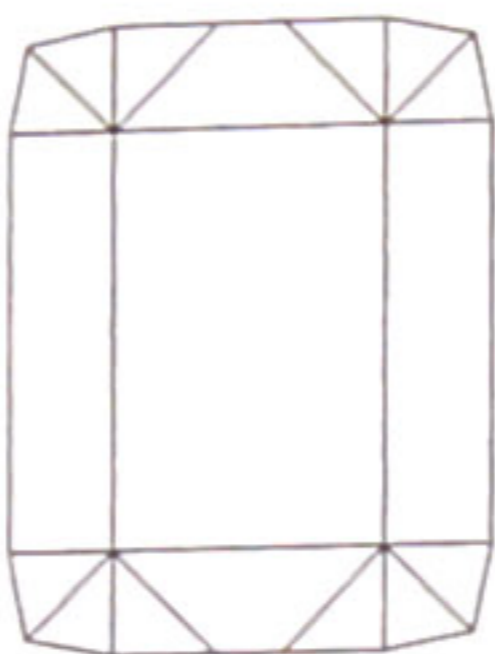
B 4011



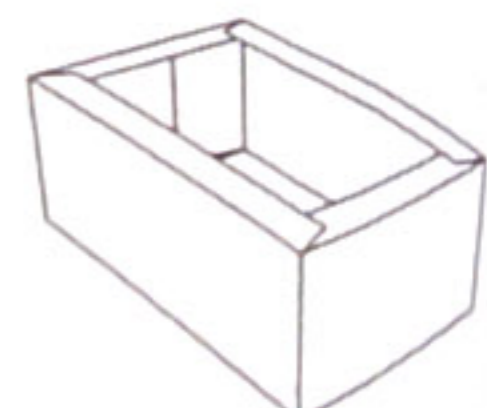
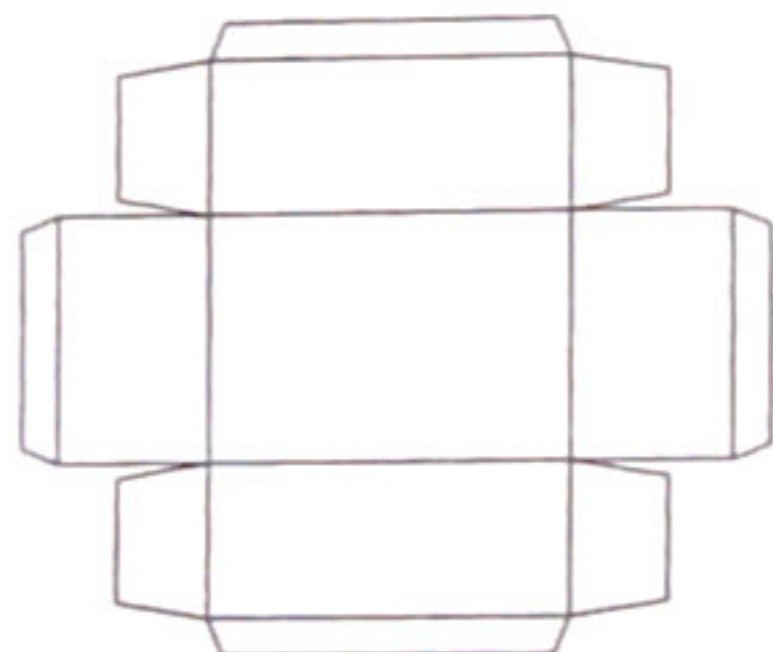
B 4020



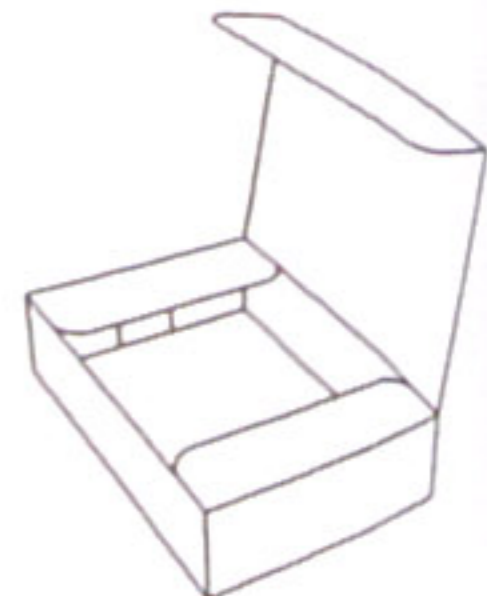
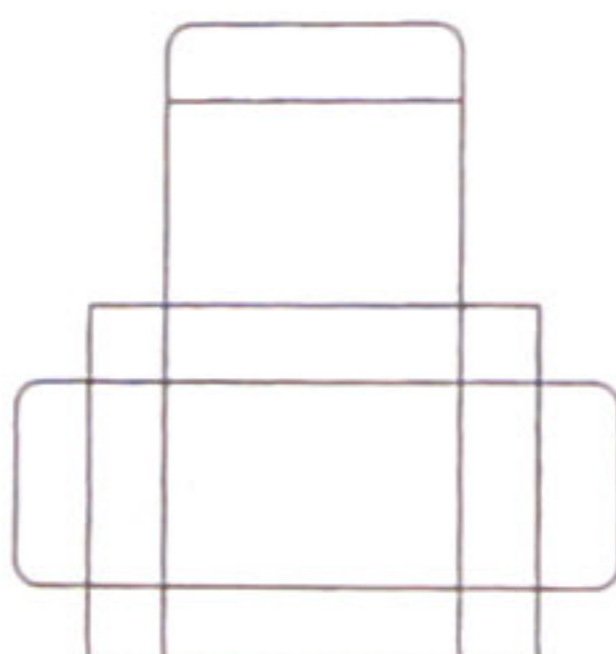
B 4021

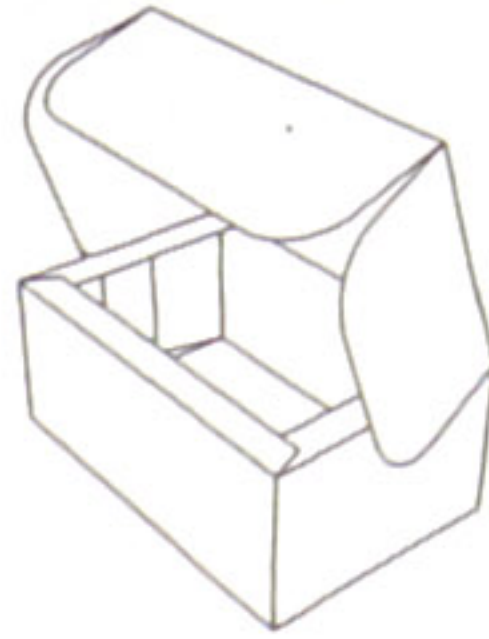
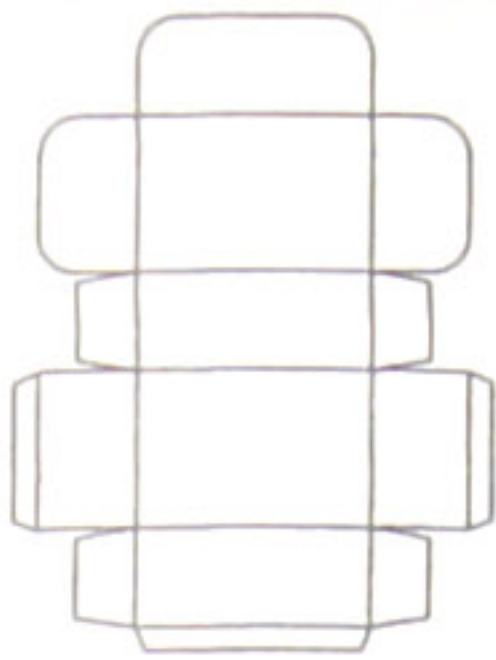


B 4110

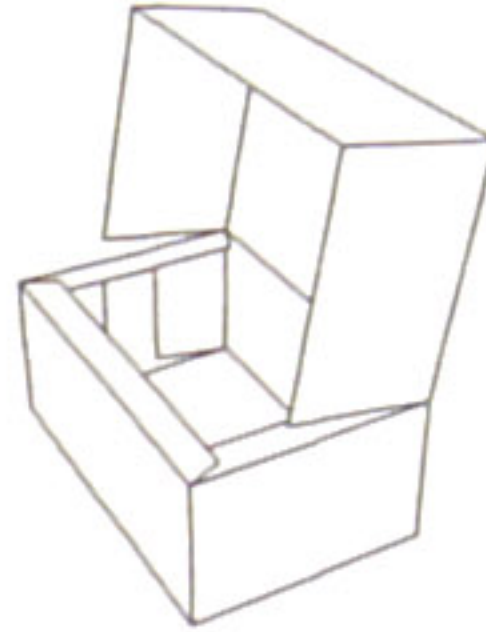
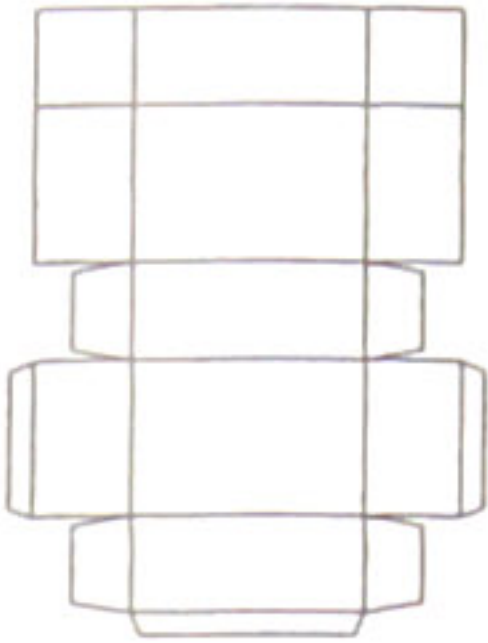


B 4150

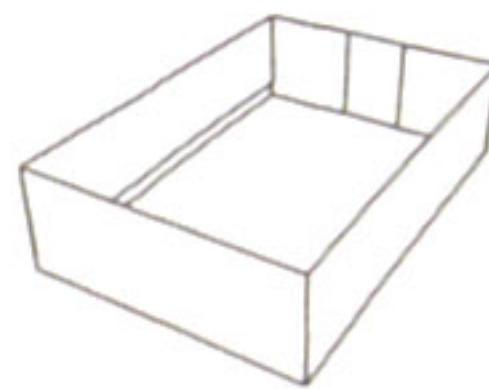
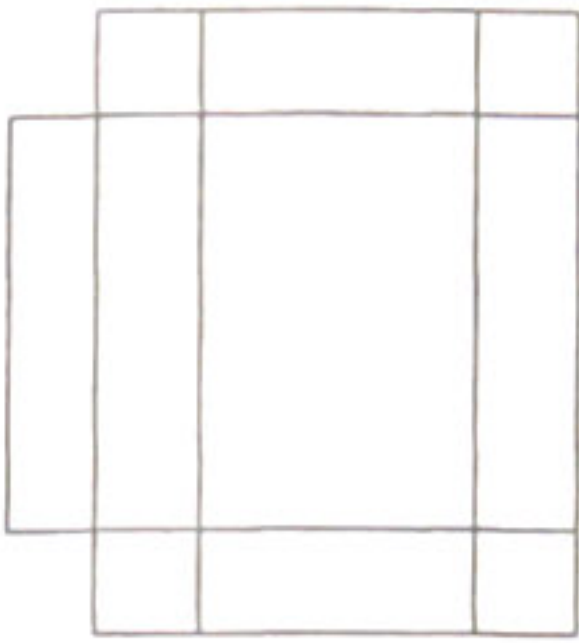




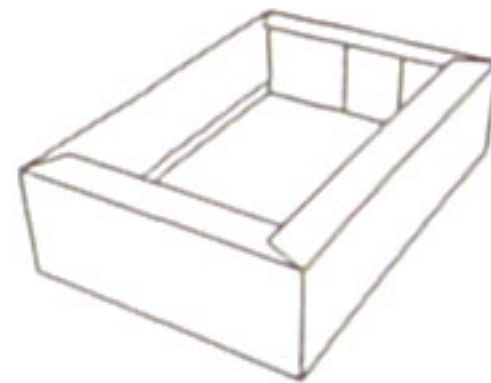
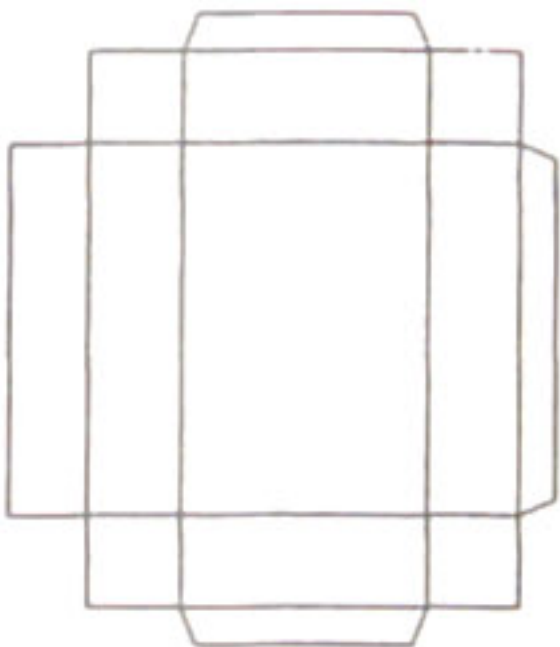
B 4153



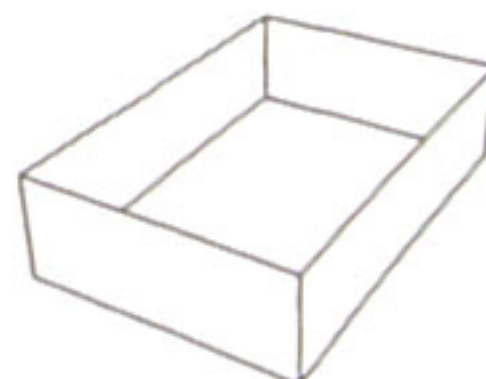
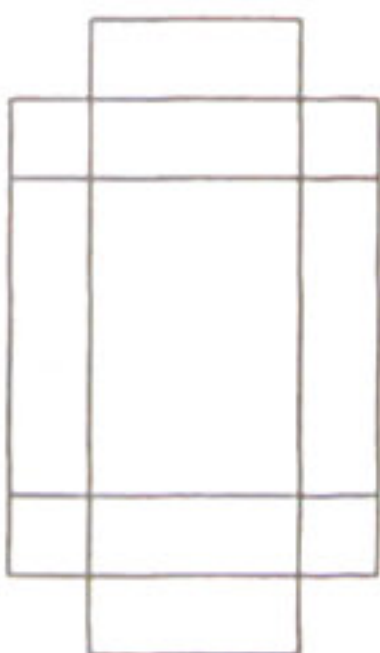
B 4160



B 4210

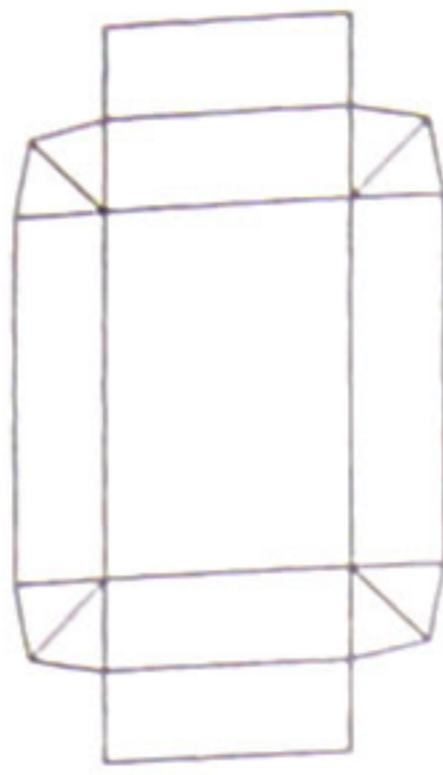


B 4310



B 4410

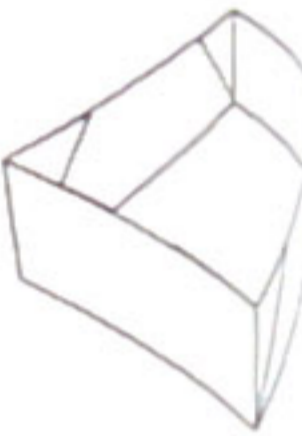
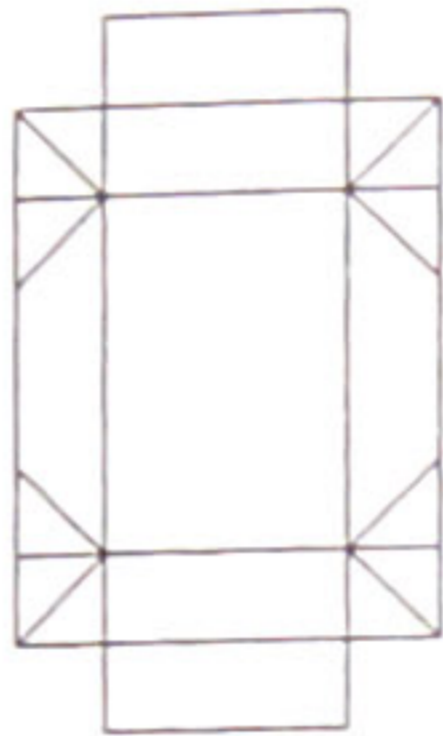
B 4411



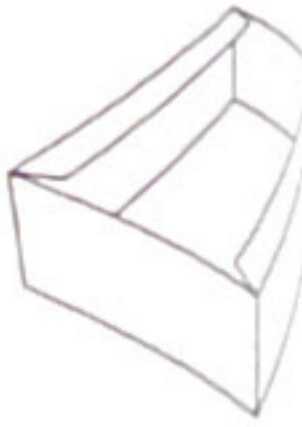
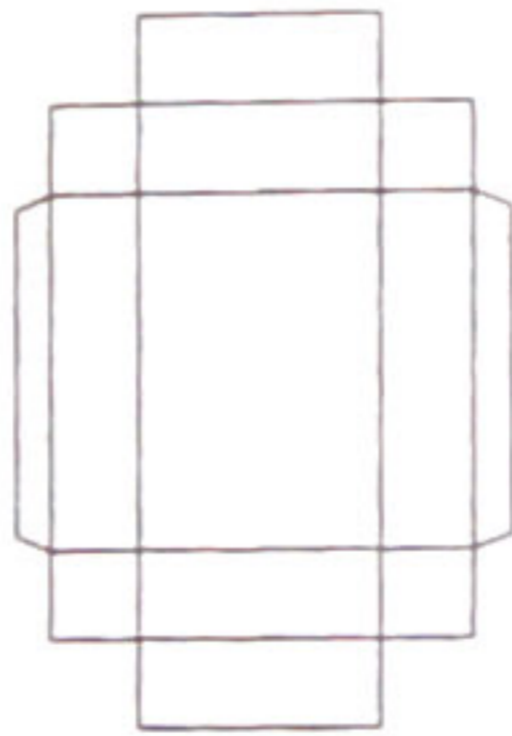
B 4420



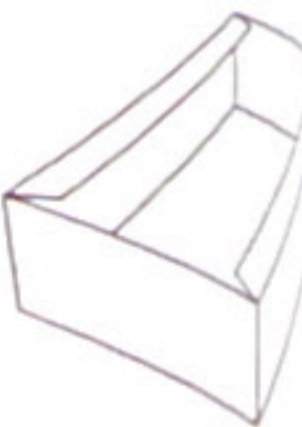
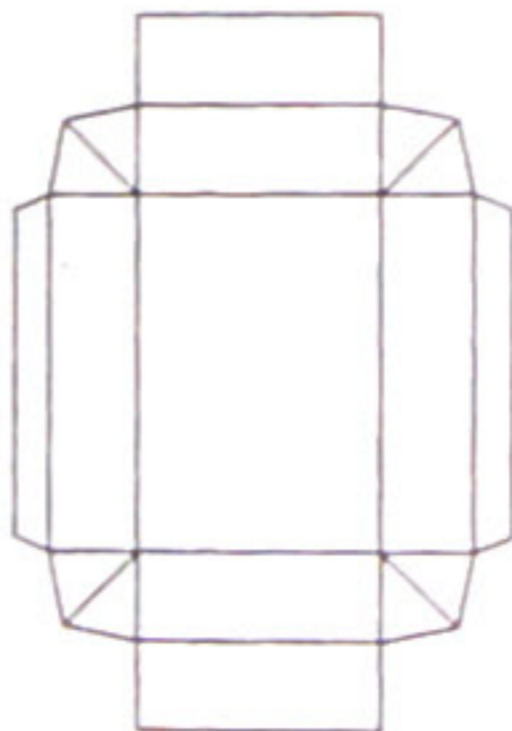
B 4421

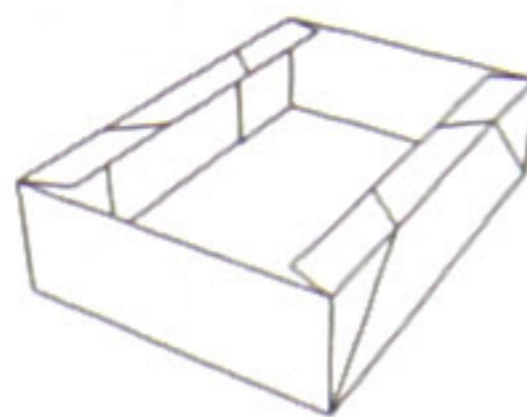
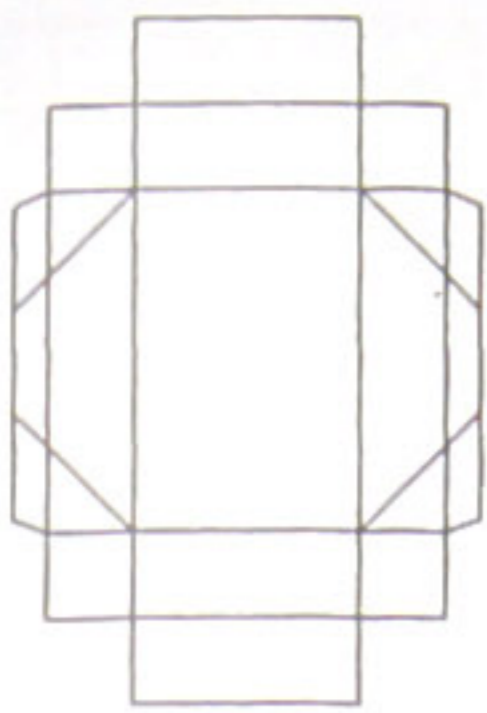


B 4510

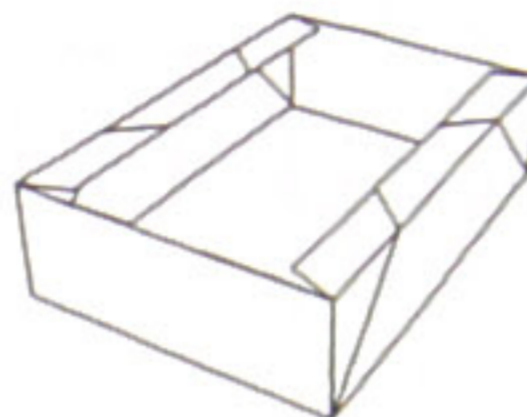
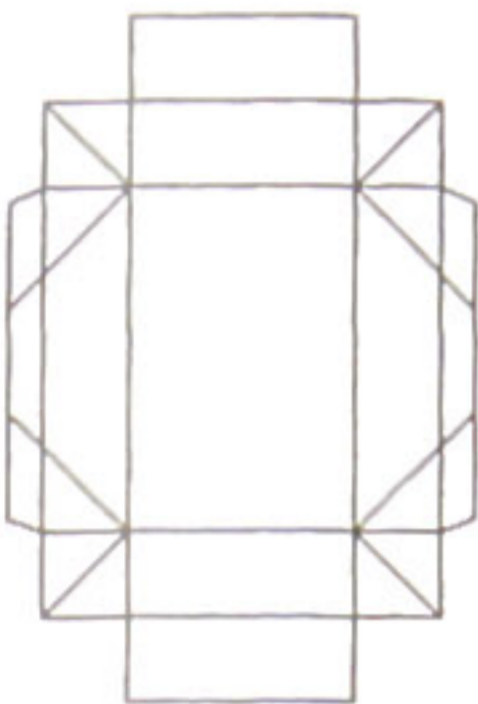


B 4511

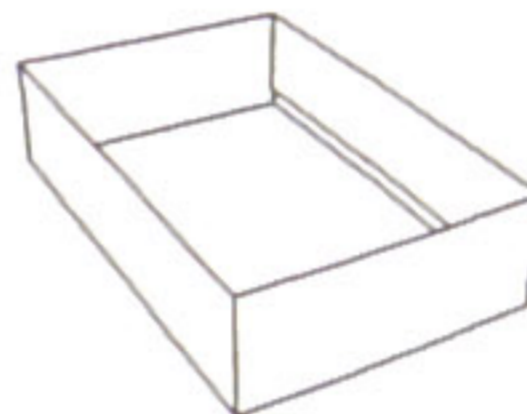
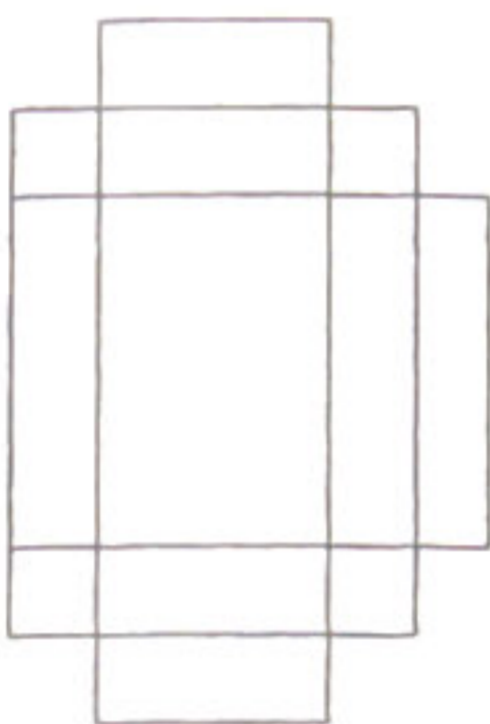




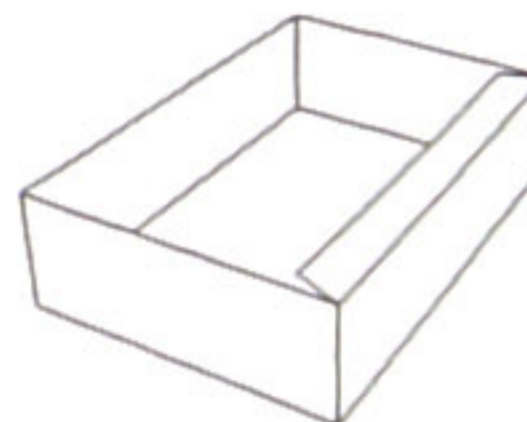
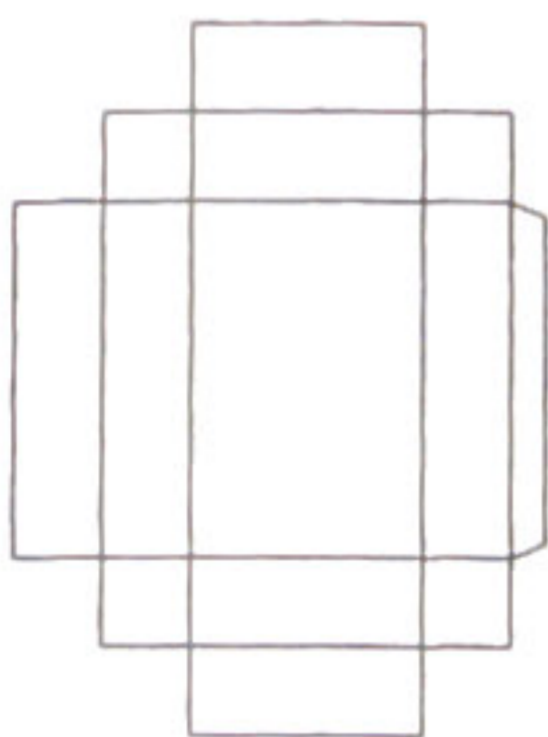
**B 4520**



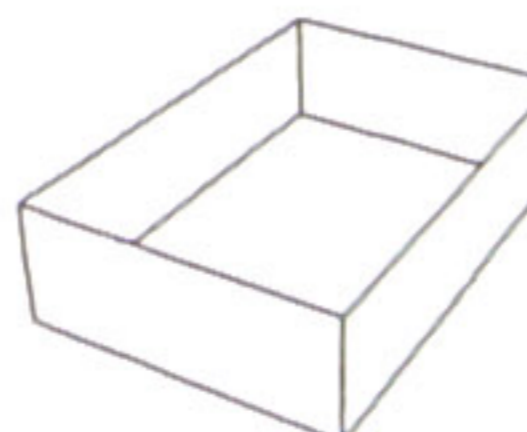
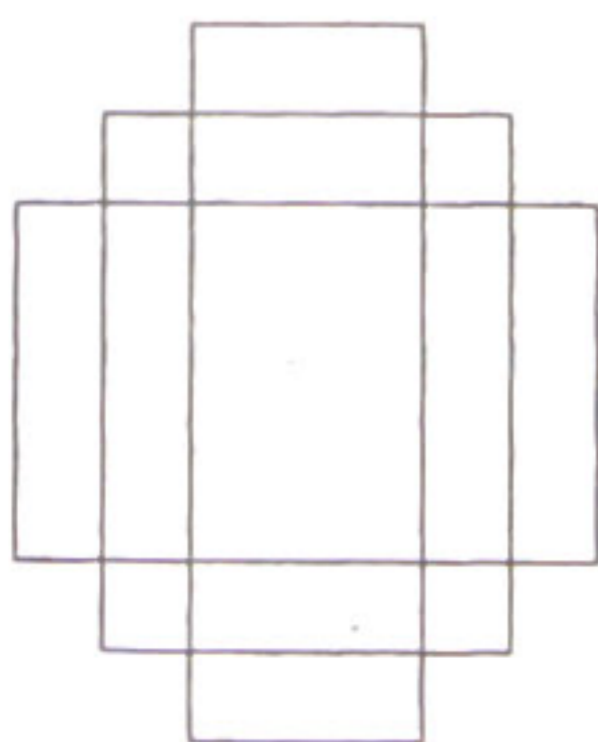
**B 4521**



**B 4610**

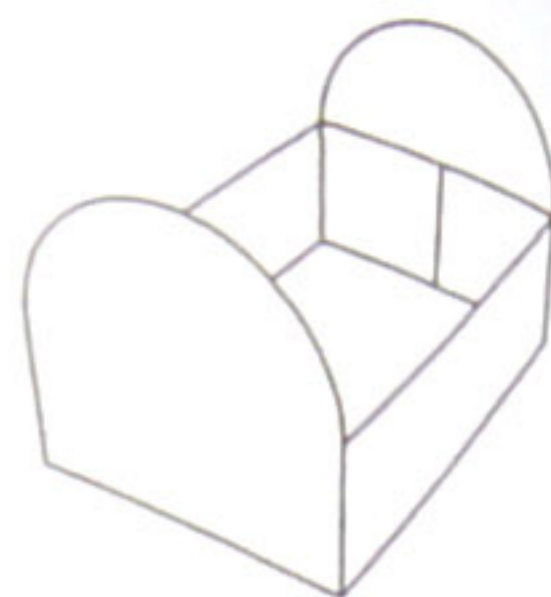


**B 4710**

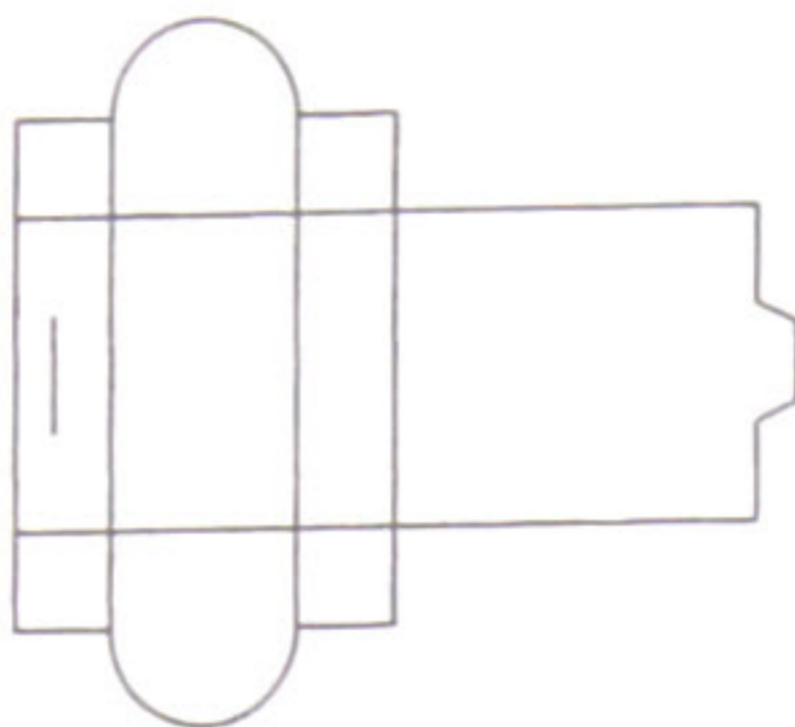


**B 4810**

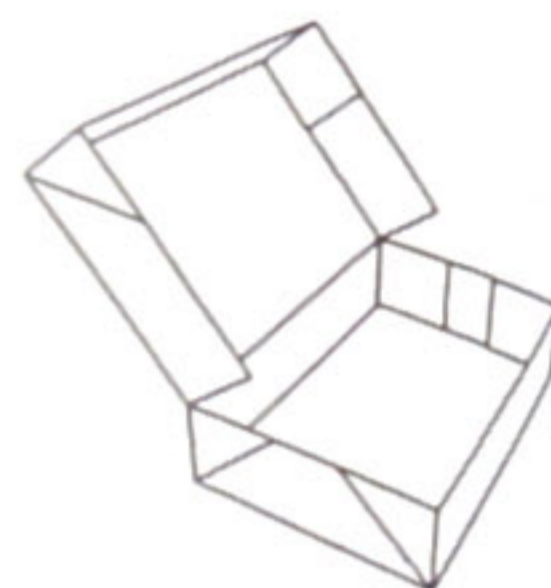
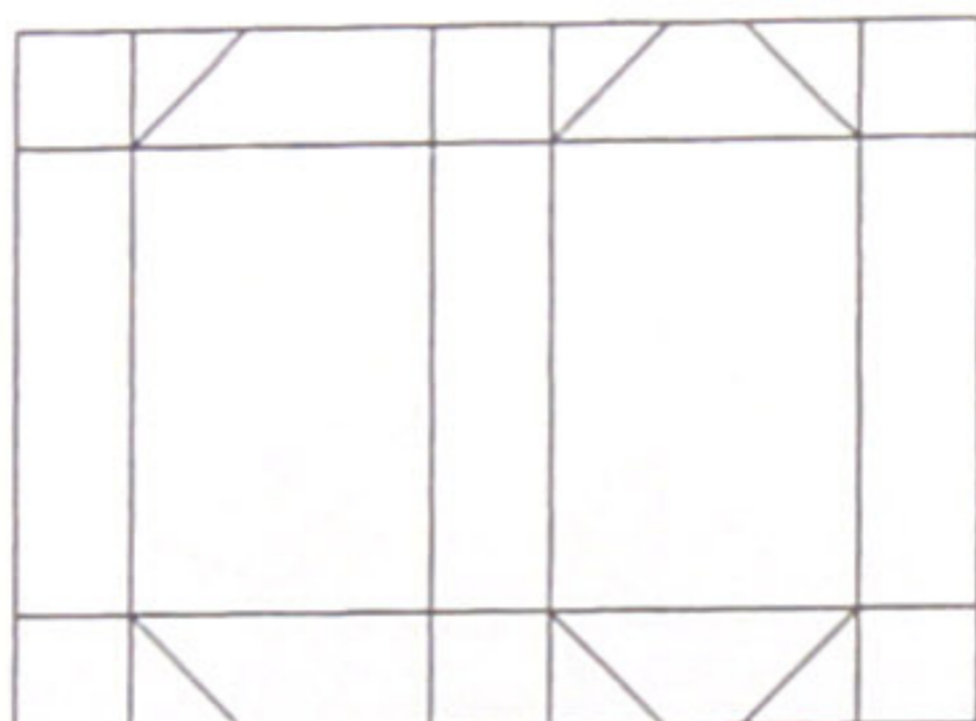
**B 4910**



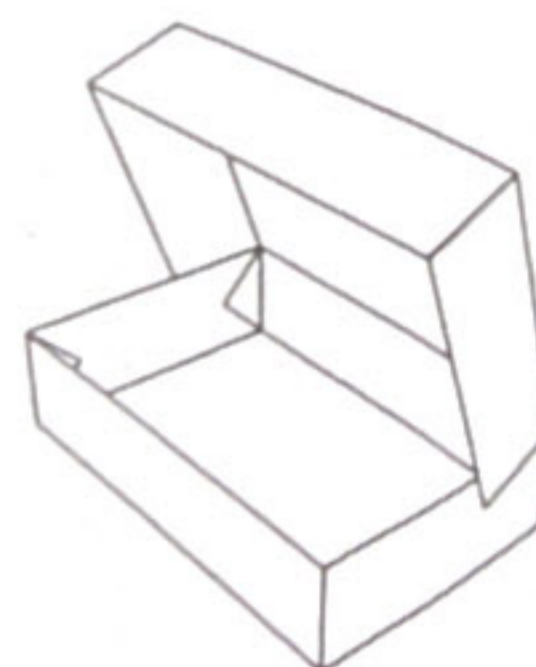
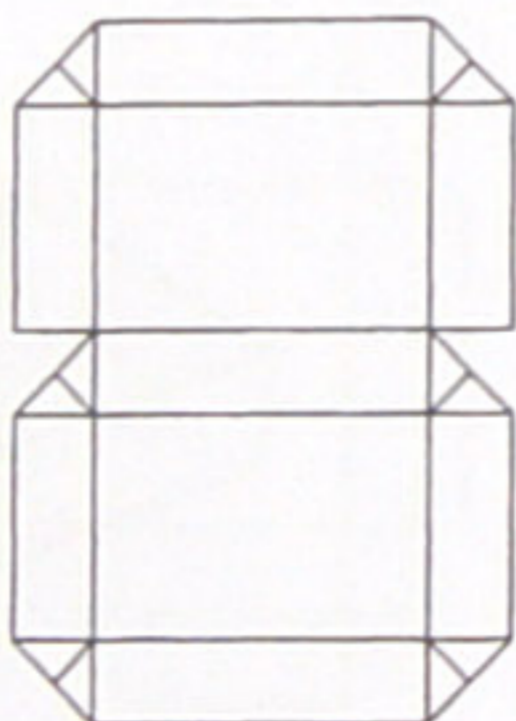
**B 4950**



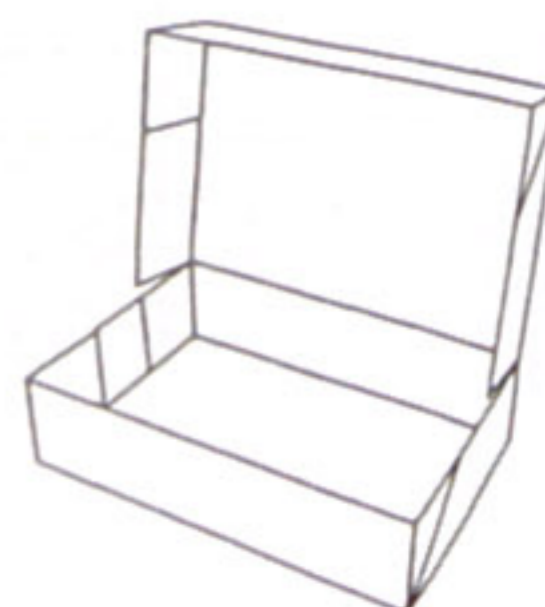
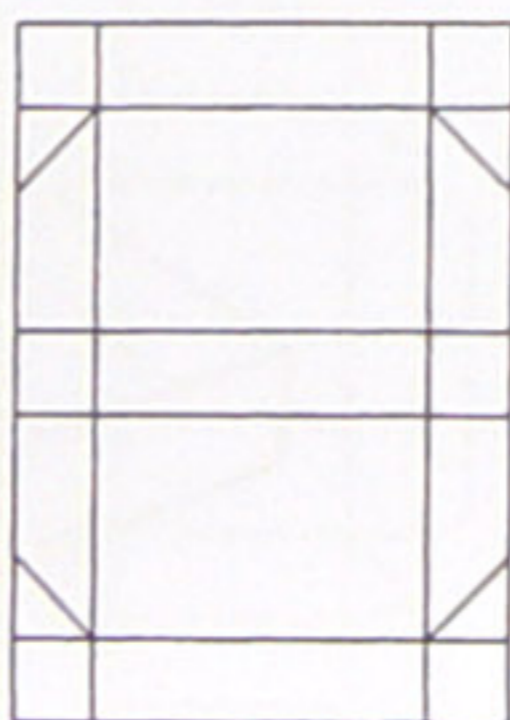
**B 6020**

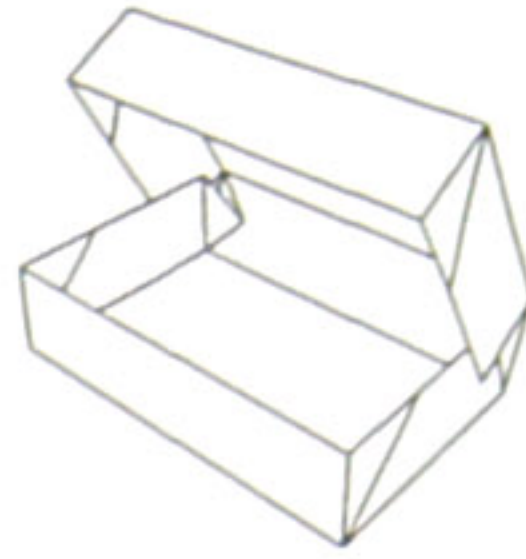
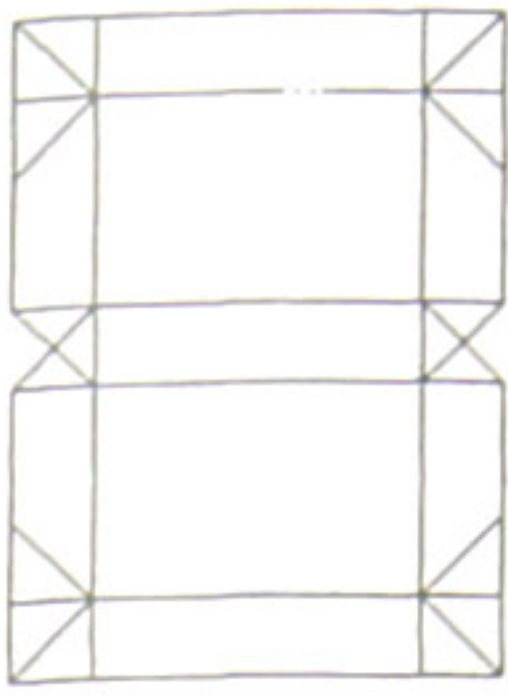


**B 6021**

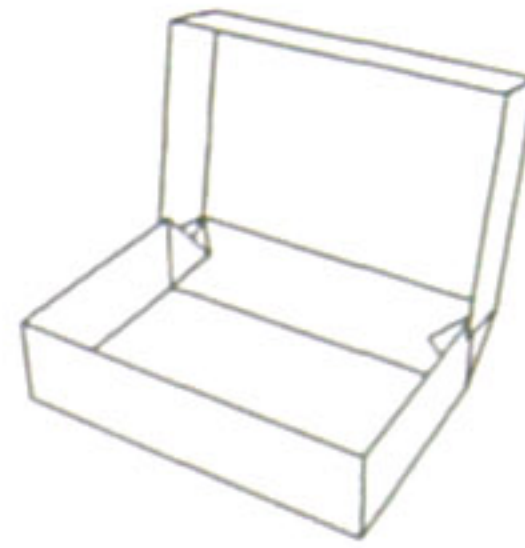
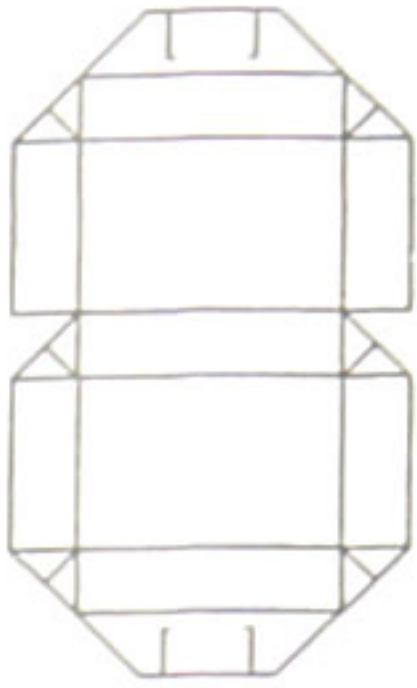


**B 6120**



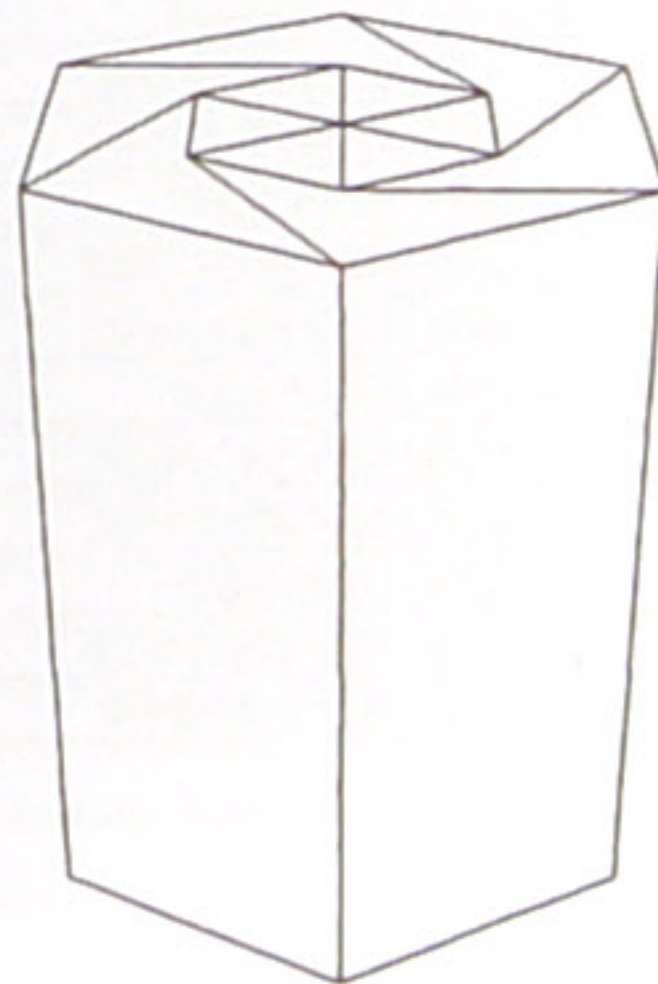
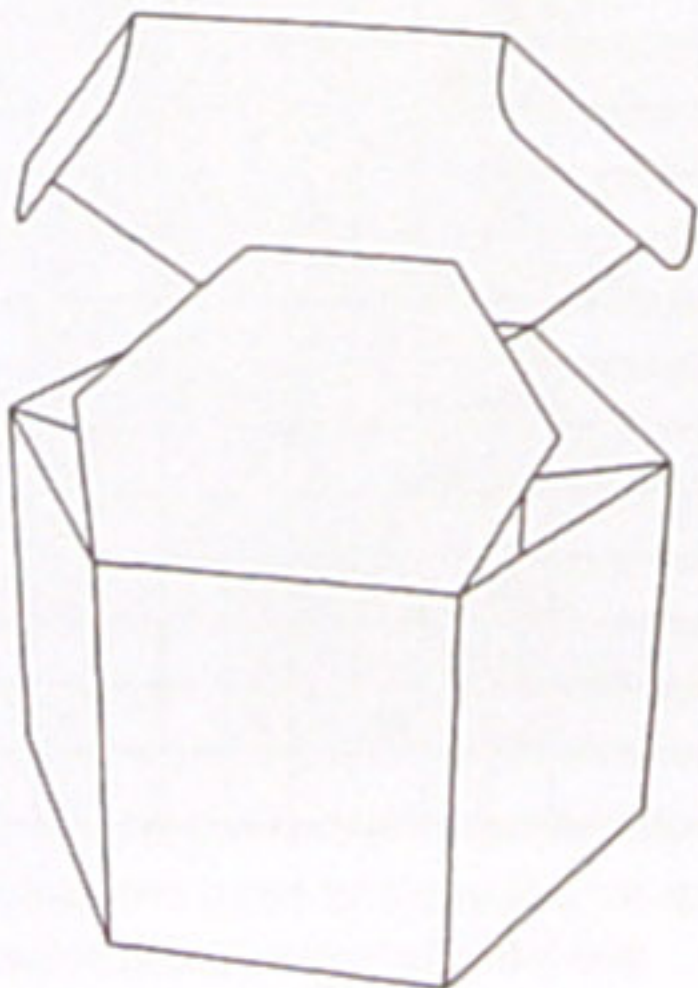
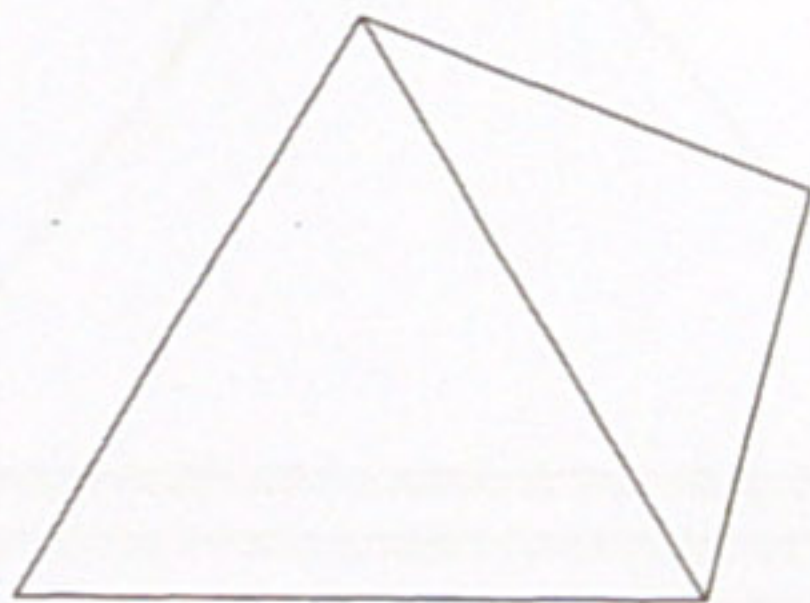
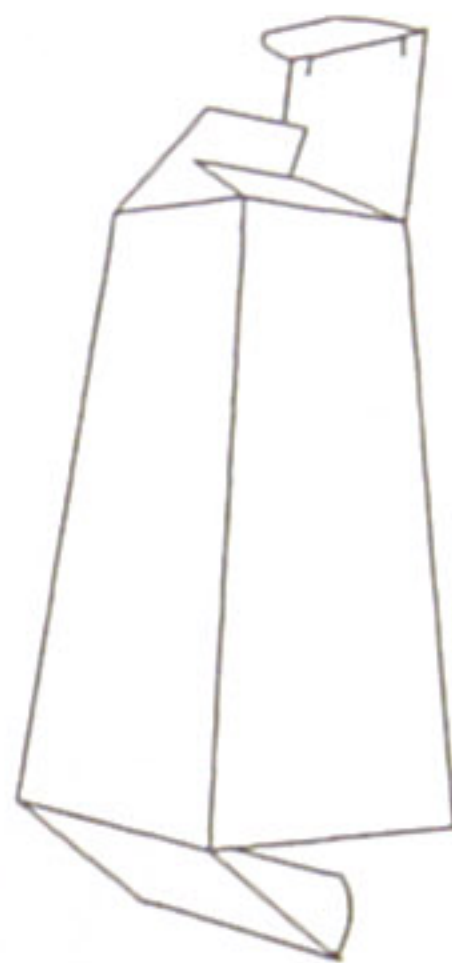


B 6121



B 6221

- C Long seam glued folding cartons with non-rectangular surfaces
- C Faltschachteln nicht-rechteckig mit Längsnahtklebung
- C Boîtes pliantes aux surfaces non rectangulaires avec patte de collage latérale
- C Cajas plegables de superficies no rectangulares con solapa de encolado lateral
- C Astucci pieghevoli a facce non-rettangolari con lembo d'incollatura laterale, piegati



Top (or Bottom)  
Lids / Closures

Base/Body

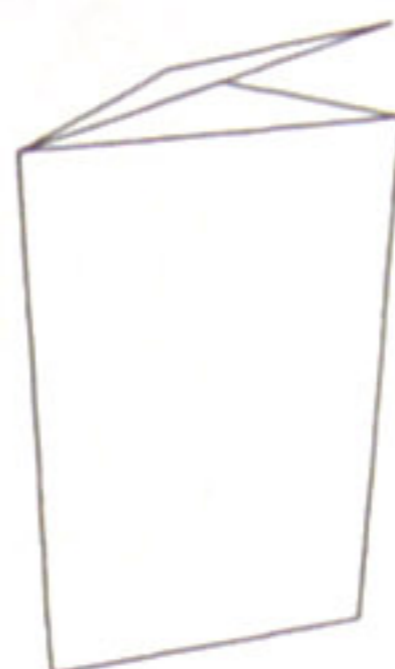
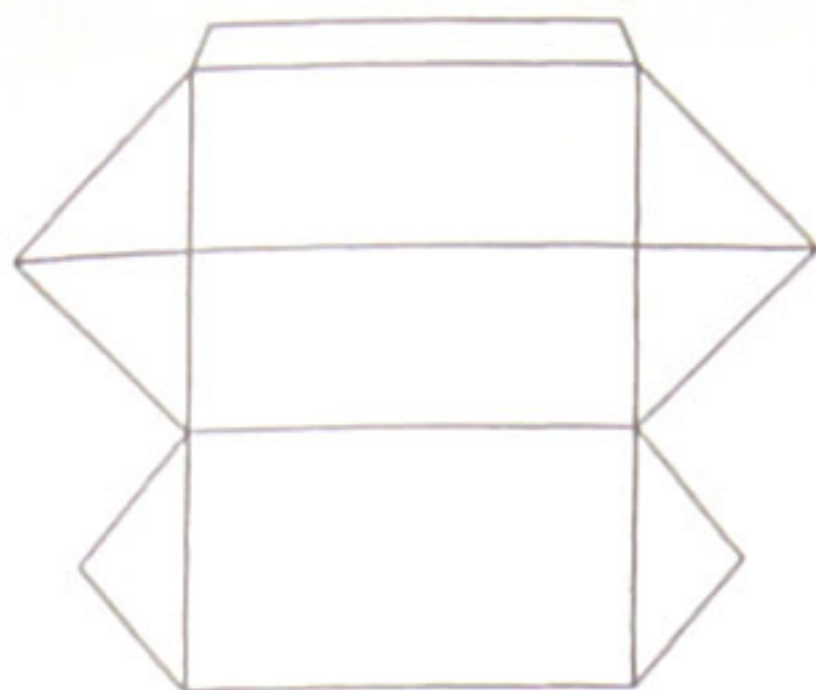
		rectangular solid	pyramid stub	pyramid	end flap full cover	cut back	tuck-in flap	envelope bottom/top	rosette closure	crash lock base	end flap full cover with extended side	tuck-in flap with extended side
		-	-	-	10	11	20	55	80	60	12	21
10	triangular, side walls rectangular	●			X	X	X	X			X	X
11	trapezium shaped		●		X	X	X	X				
12	triangular			●	X	X	X	X				
20	4 cornered, side walls rectangular	●			see Group A							
21	side walls trapezium		●		X	X	X	X		X		
22	side walls triangular			●	X	X	X	X				
30	5 cornered, side walls rectangular	●			X	X	X		X			X
31	side walls trapezium		●		X	X	X		X			
32	side walls triangular			●	X	X	X		X			
40	6 cornered, side walls rectangular	●			X	X	X		X	X		X
41	side walls trapezium		●		X	X	X		X			
42	side walls triangular			●	X	X	X		X			
50	8 cornered, side walls rectangular	●			X	X			X			
51	side walls trapezium		●		X	X						
52	side walls triangular			●	X	X			X			

- Body
- X Design
- ☐ In sketch

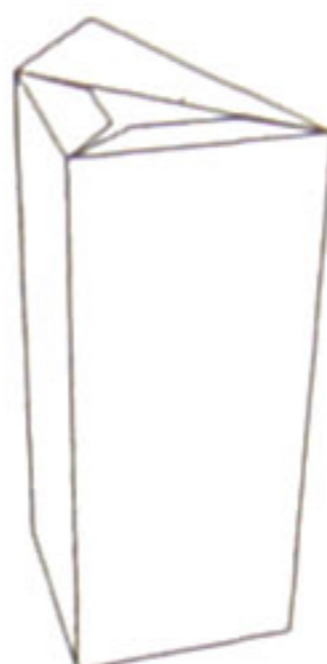
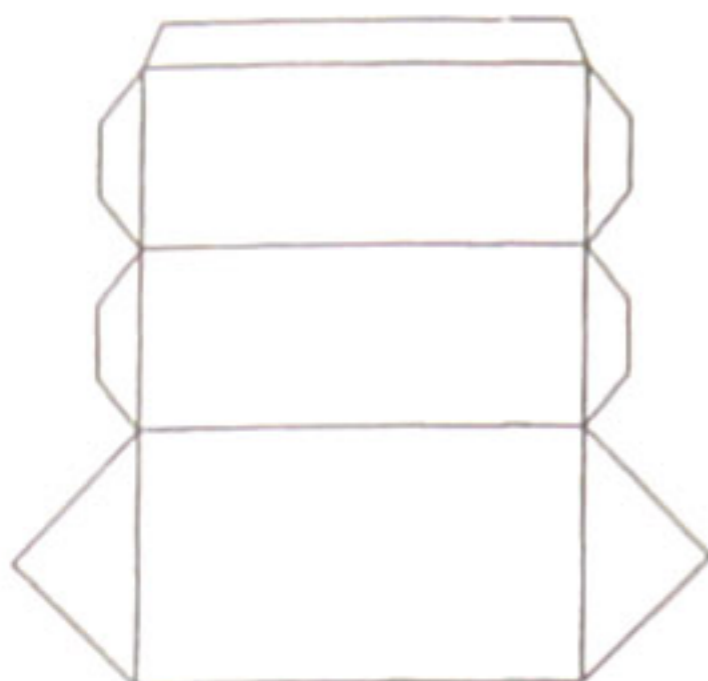
**Warning:** for patents and other protective rights see introduction page i 3, letter B.

For special designs from C see Group F30.

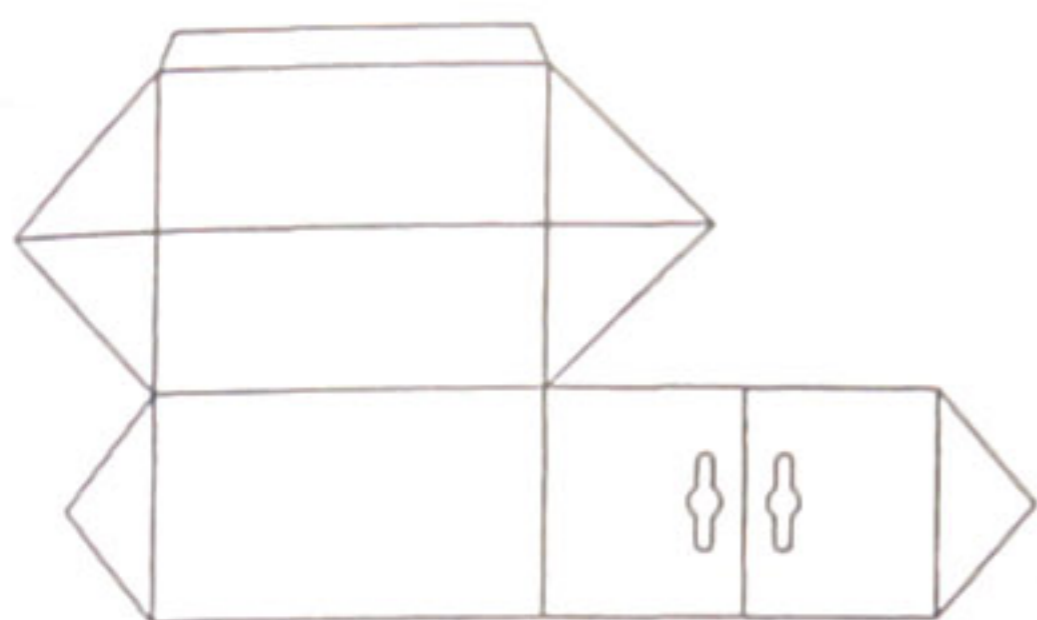




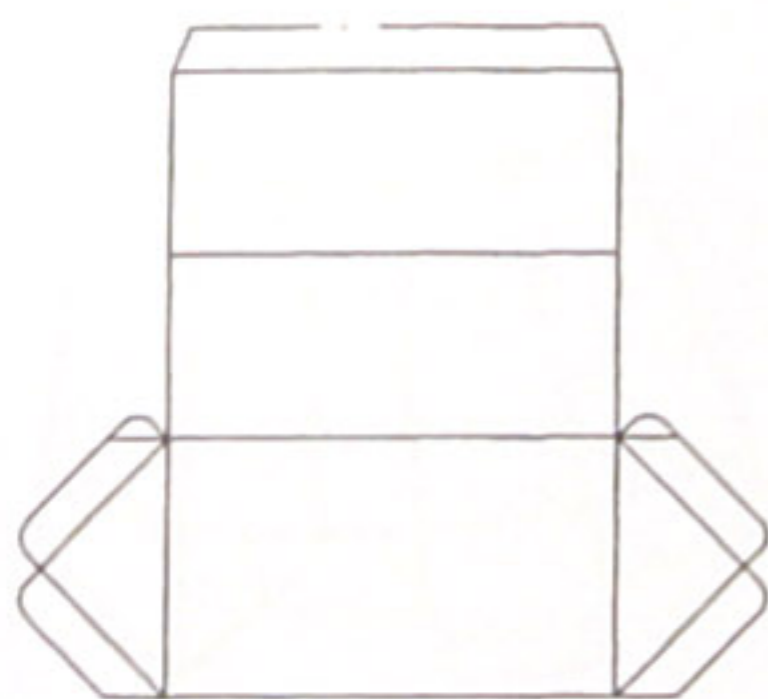
C 1010



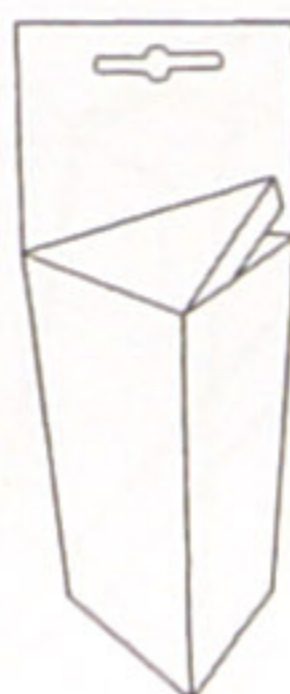
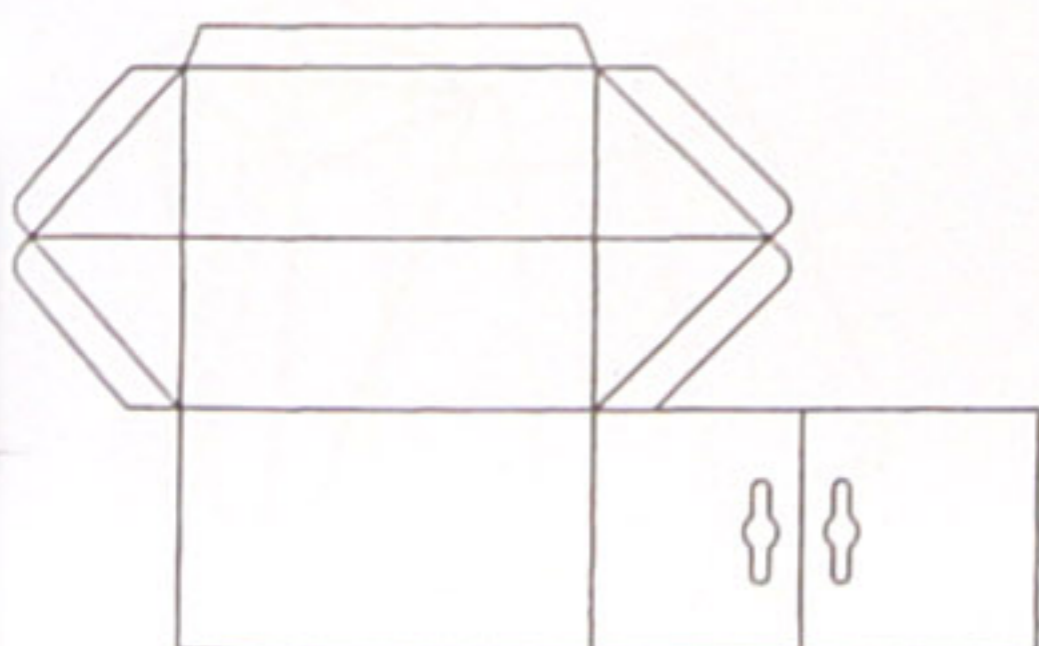
C 1011



C 1012

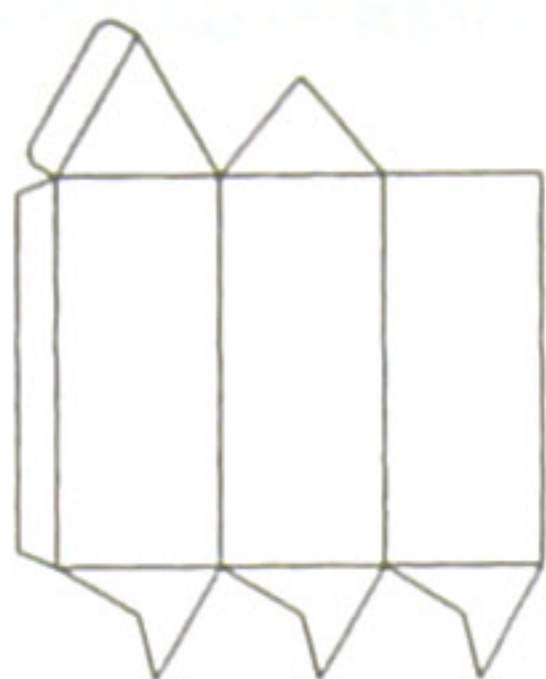


C 1020

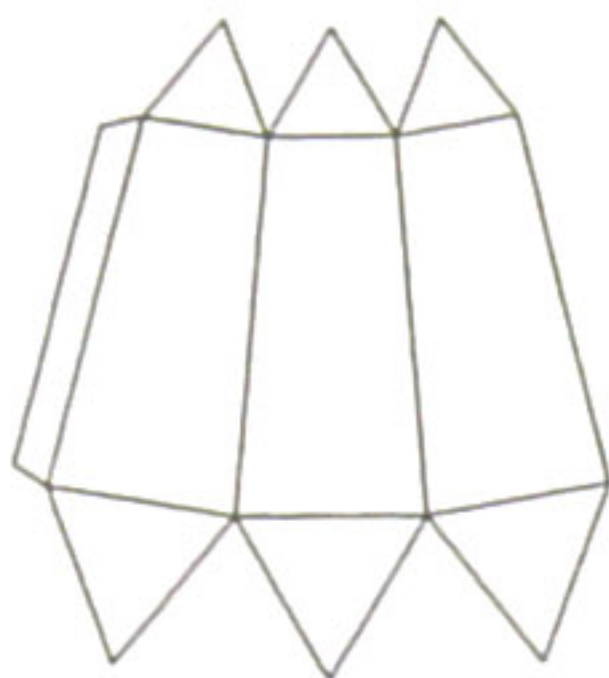


C 1021

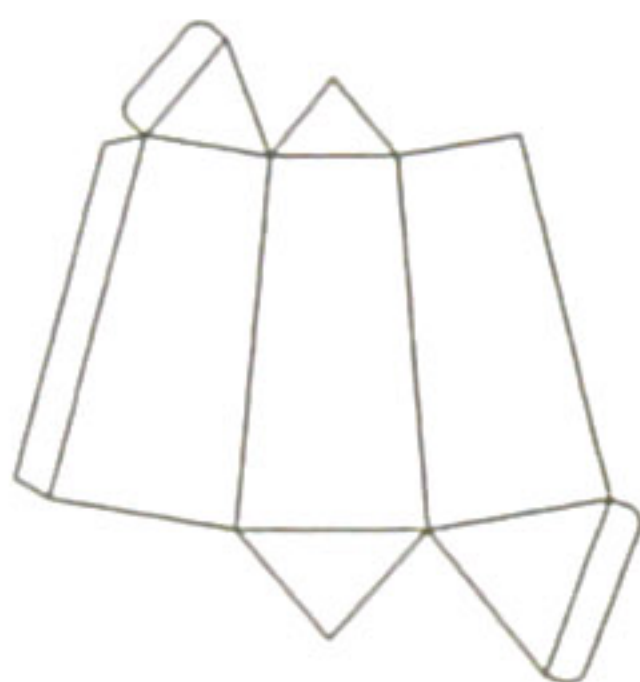
C 1055



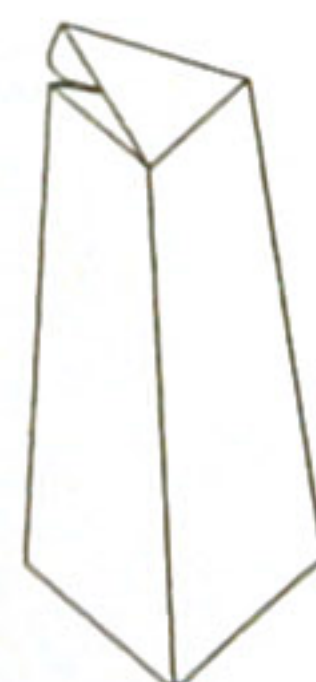
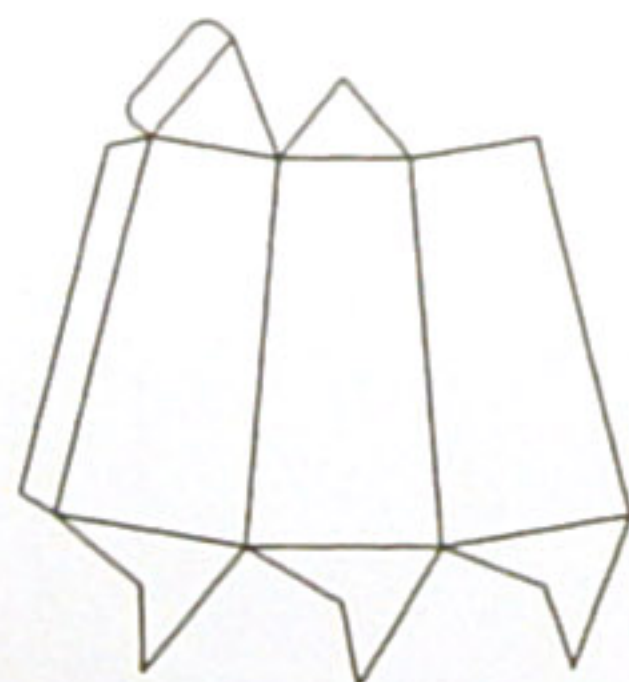
C 1110



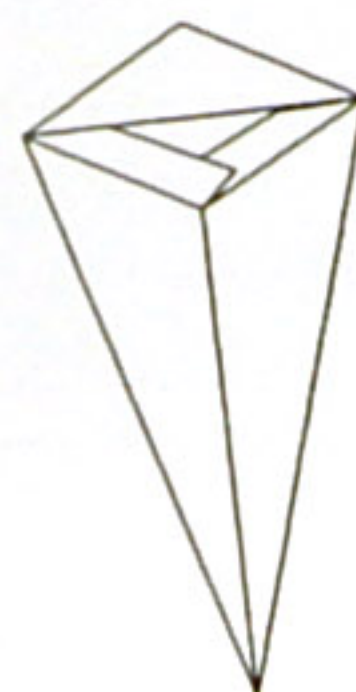
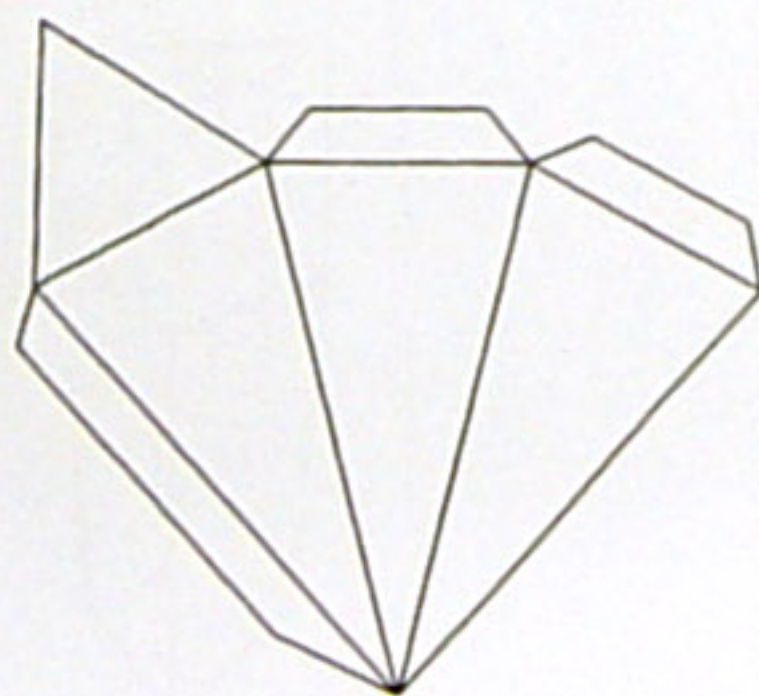
C 1120

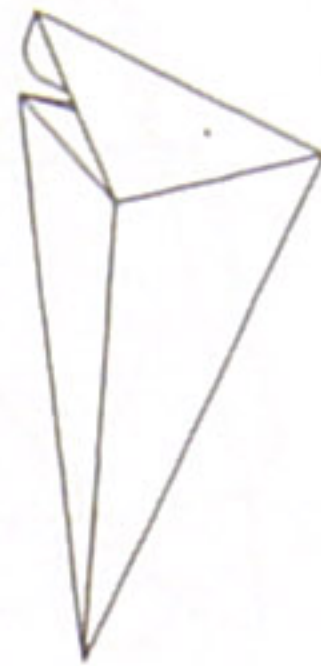
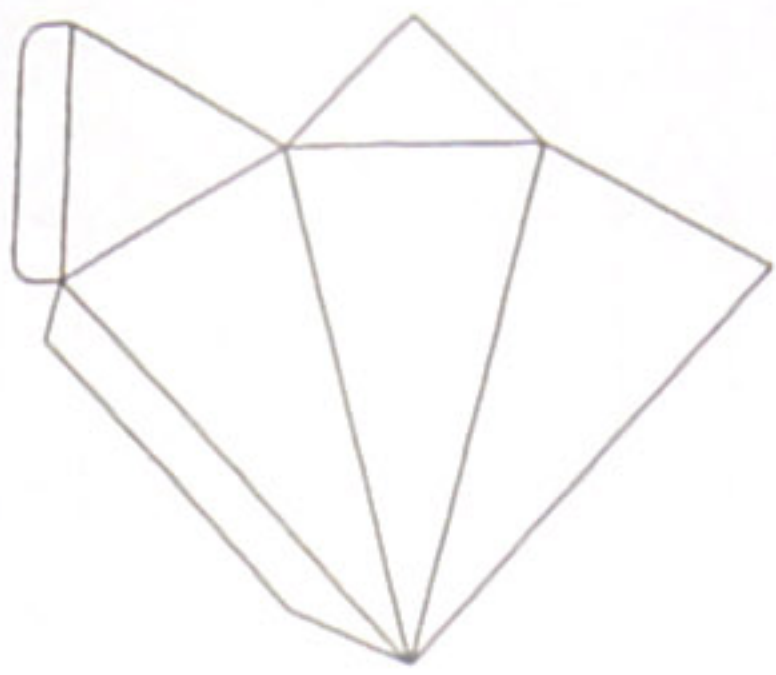


C 1155

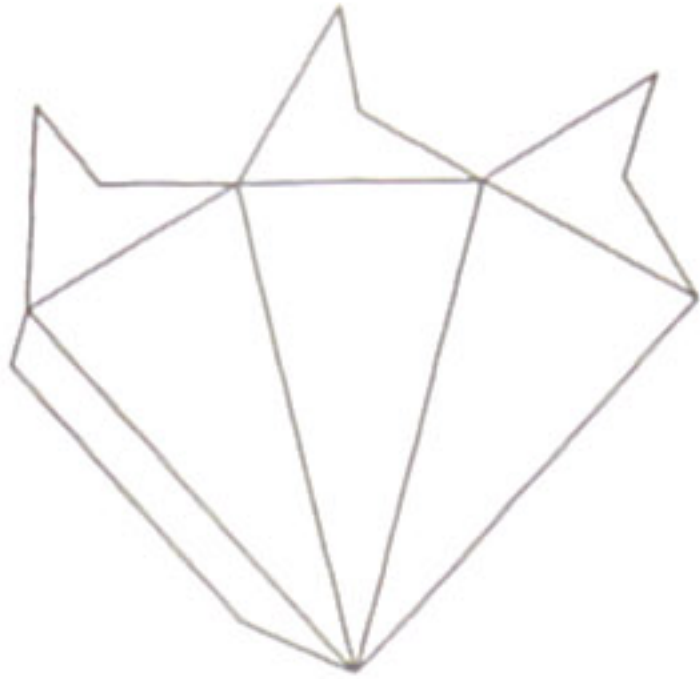


C 1211

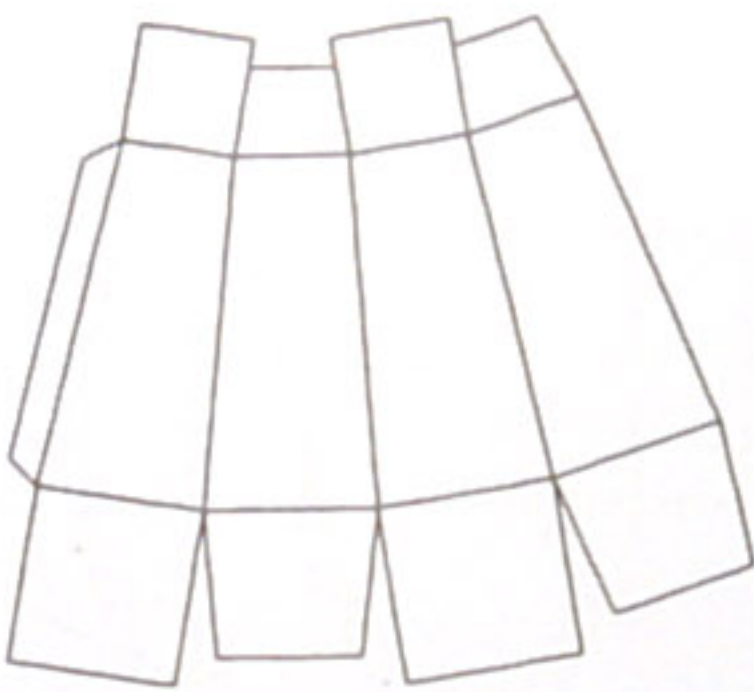




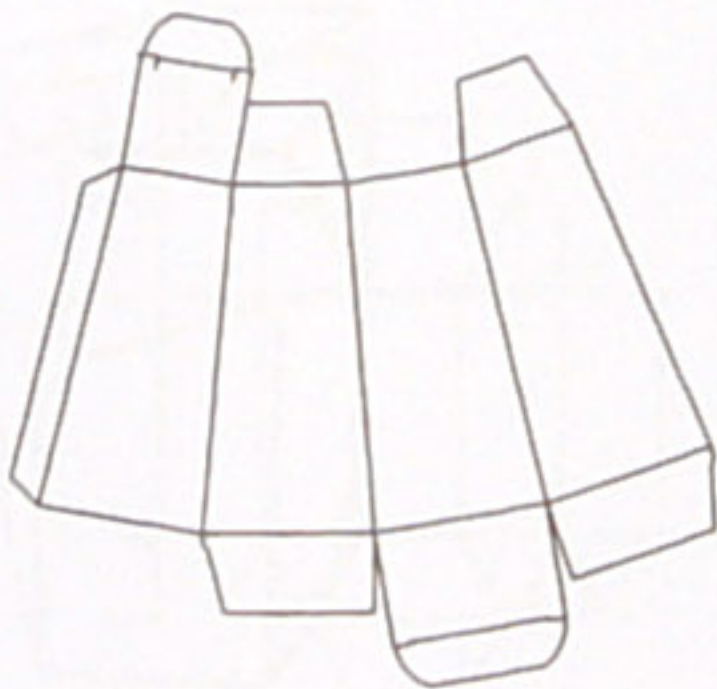
C 1220



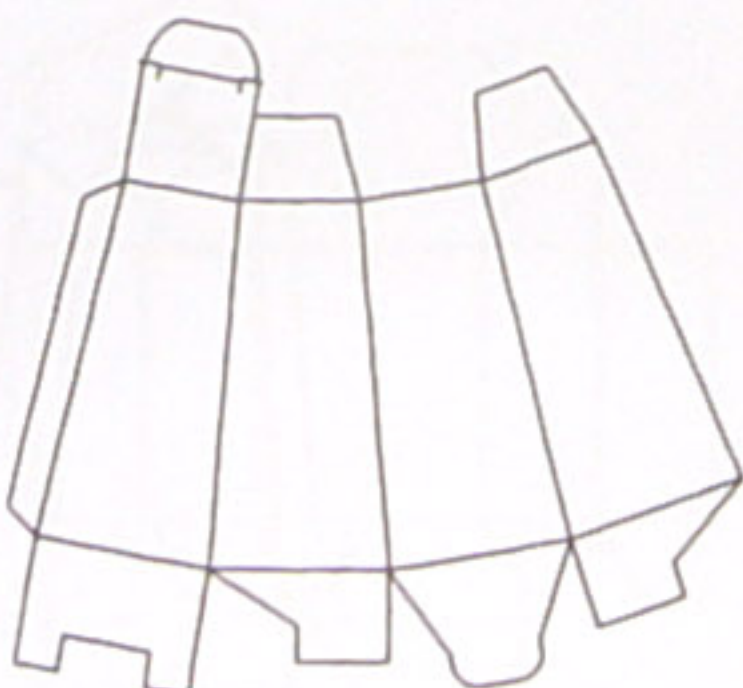
C 1255



C 2110

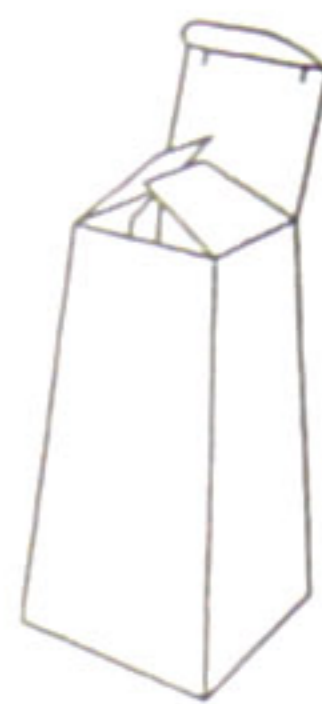
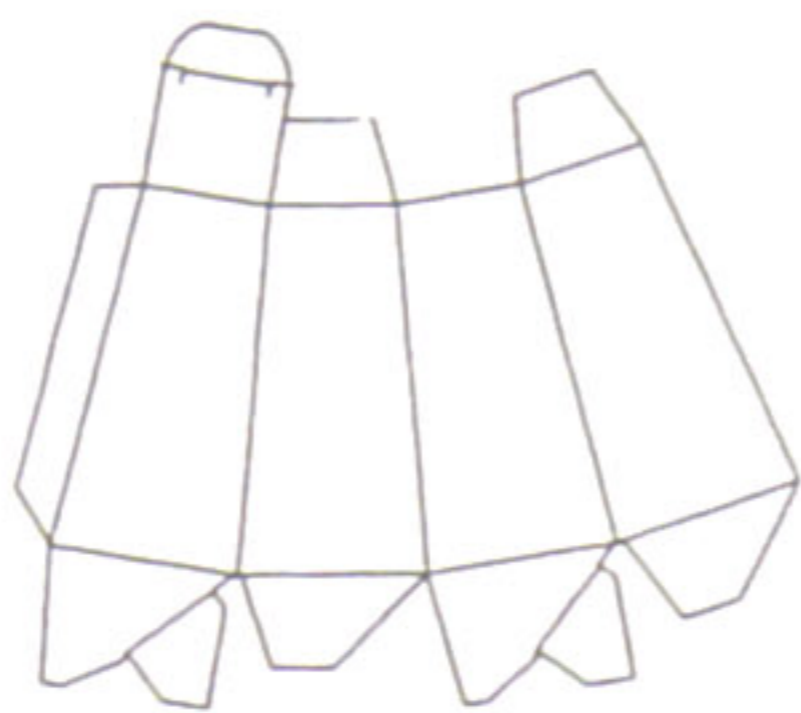


C 2120

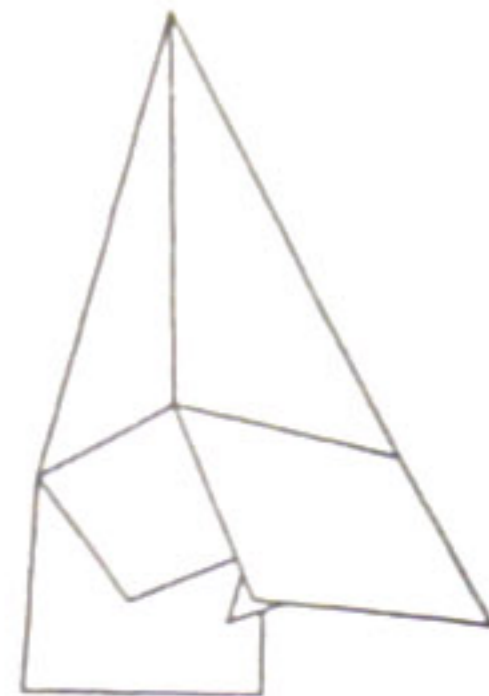
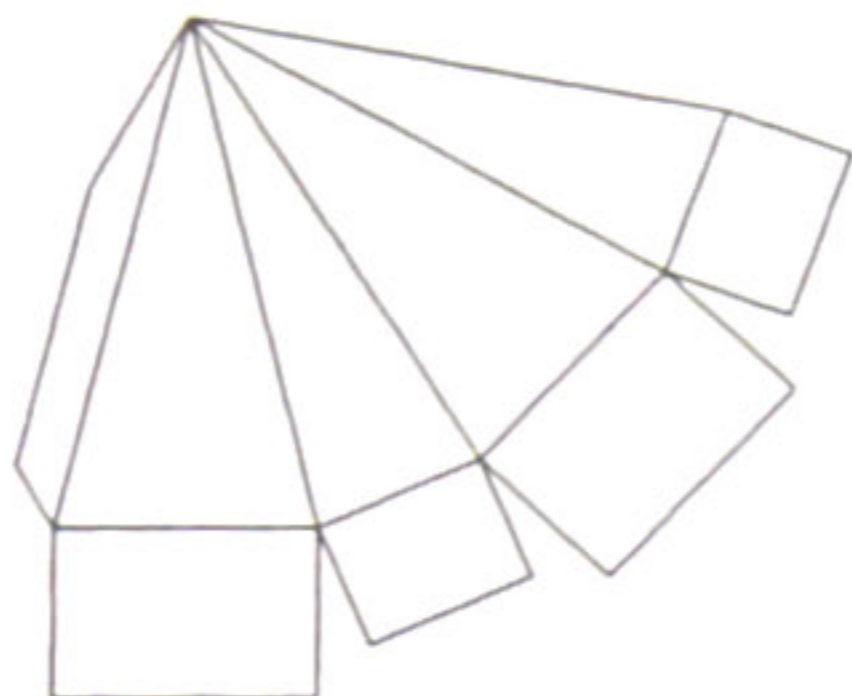


C 2155

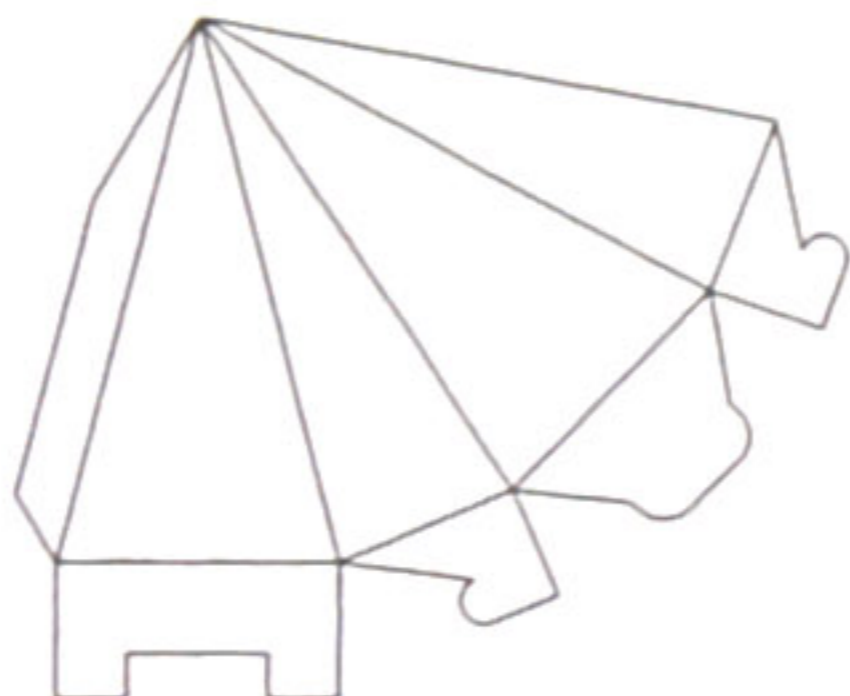
C 2160



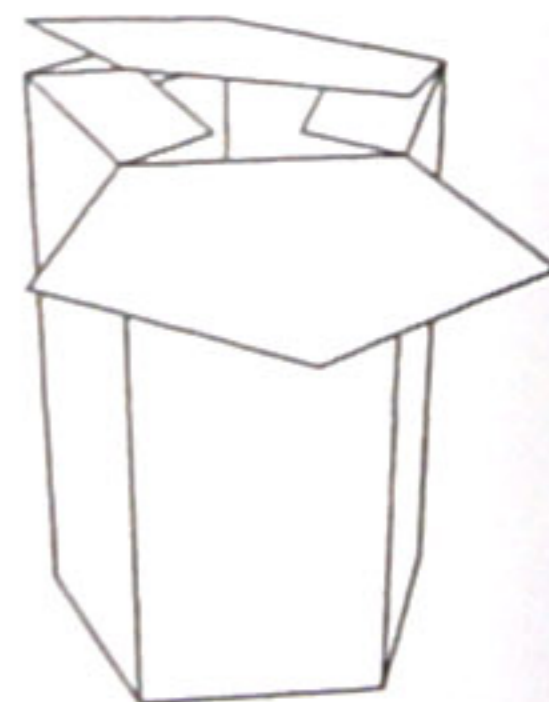
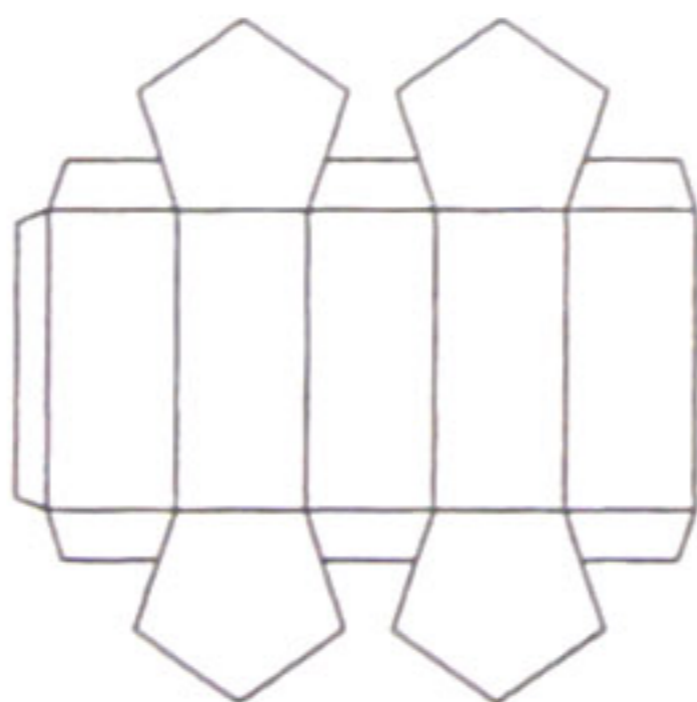
C 2210



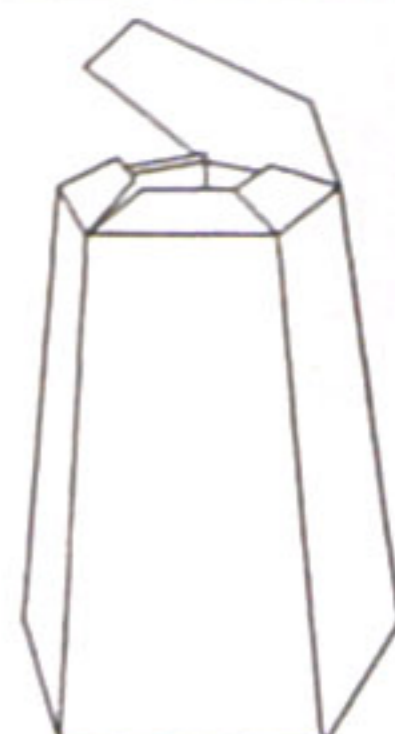
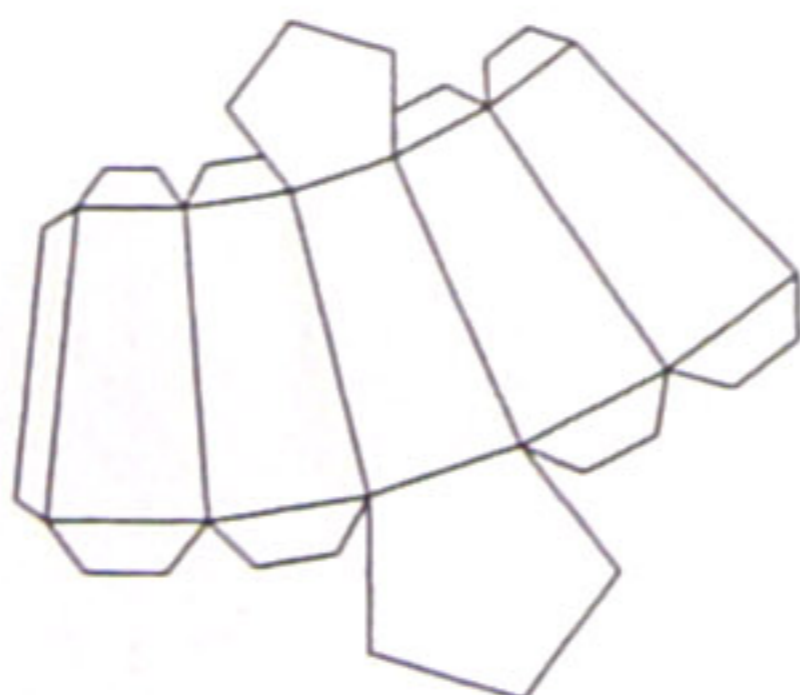
C 2255

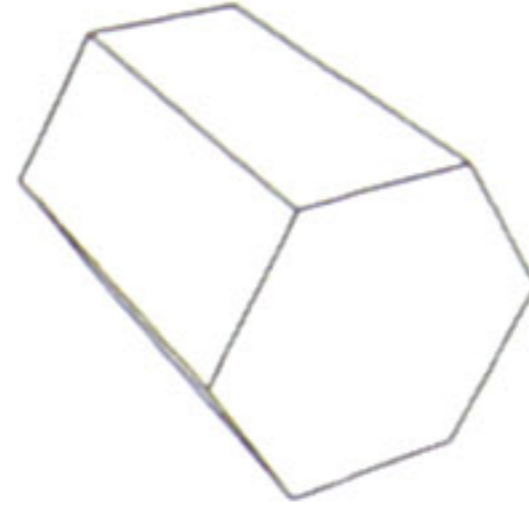
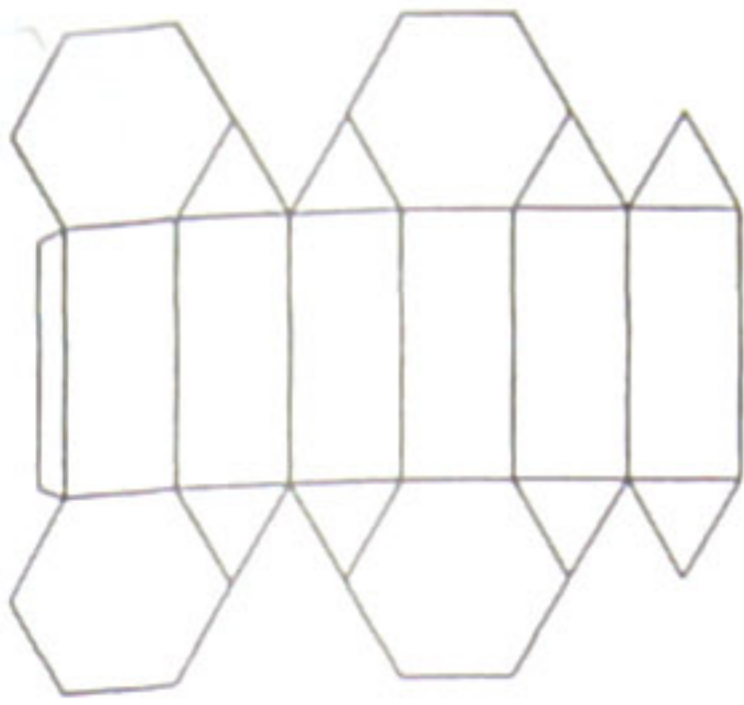


C 3010

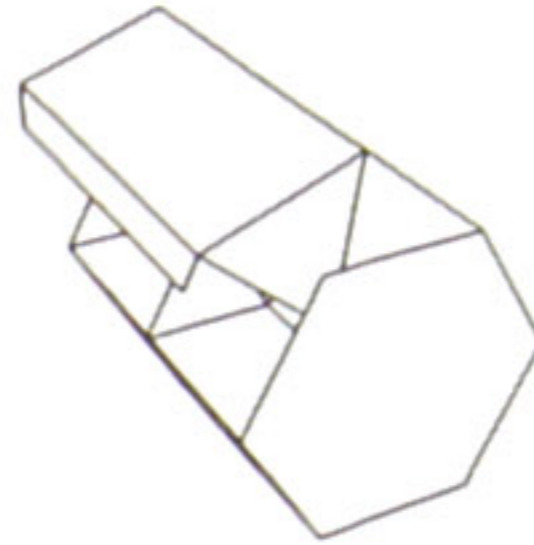
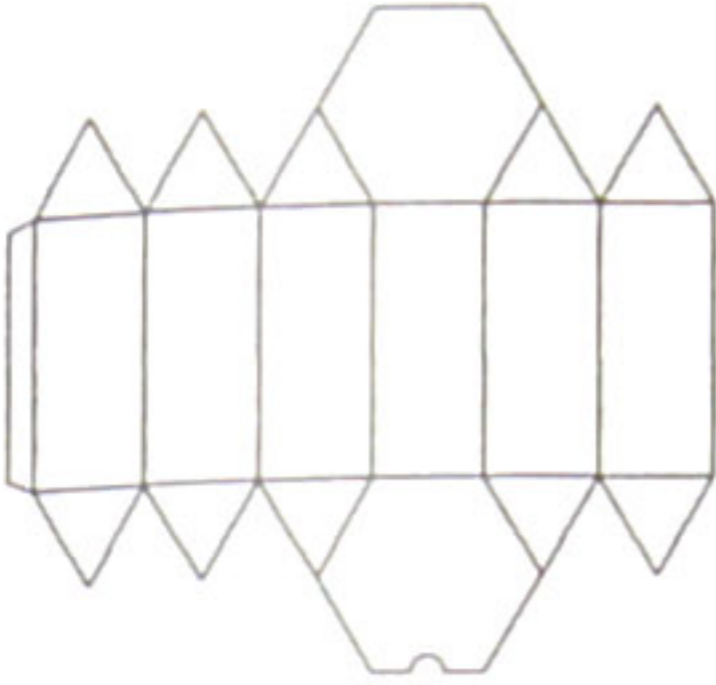


C 3111

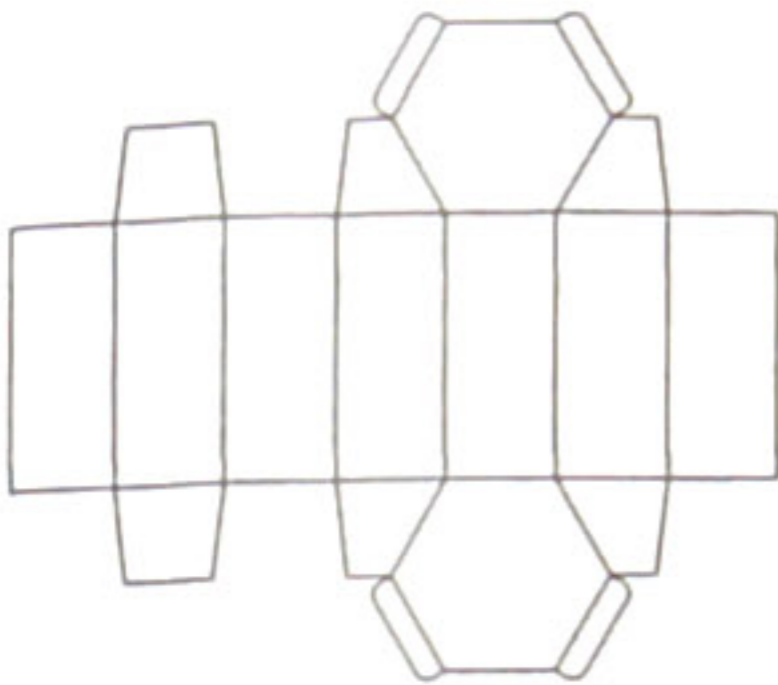




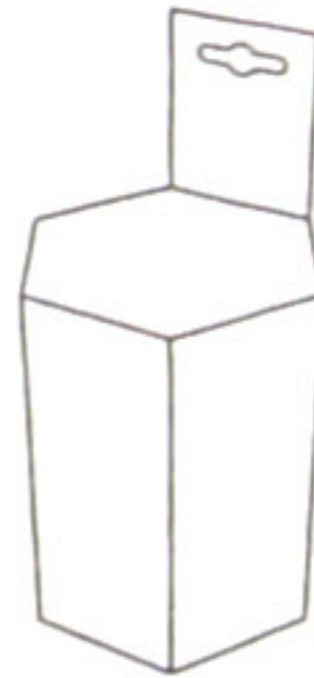
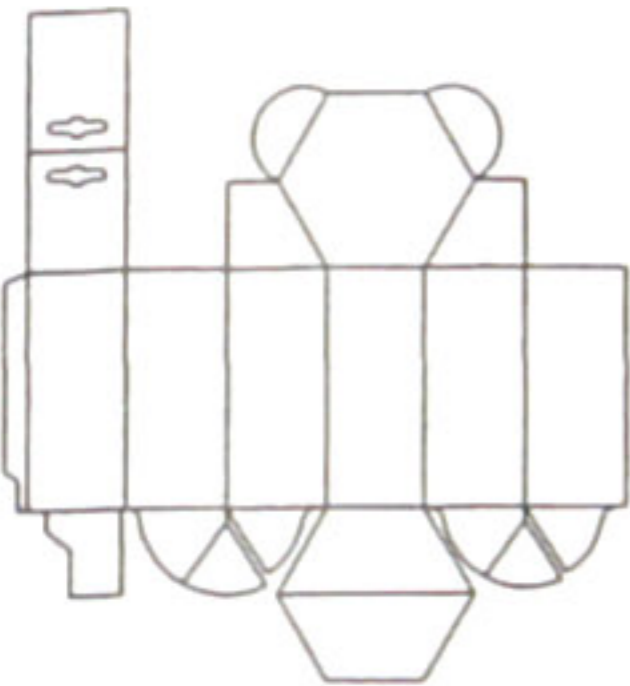
C 4010



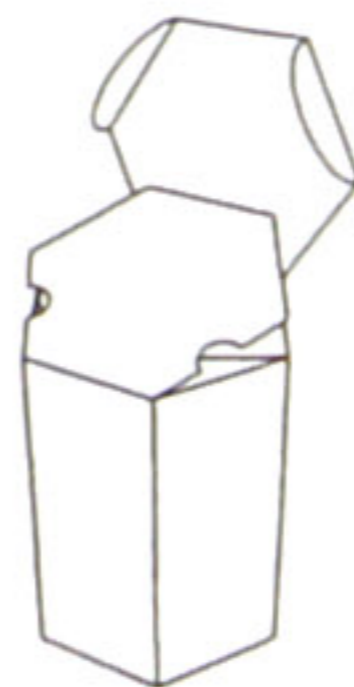
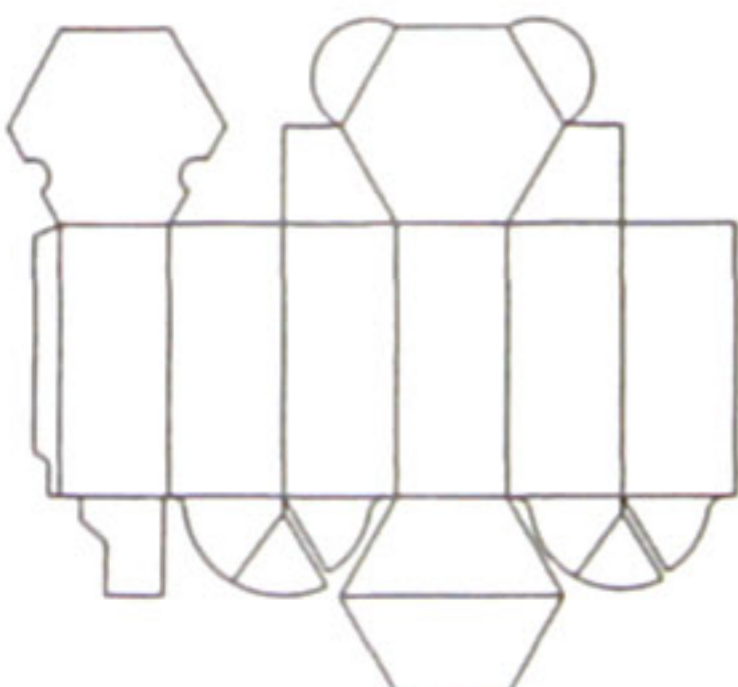
C 4011



C 4020

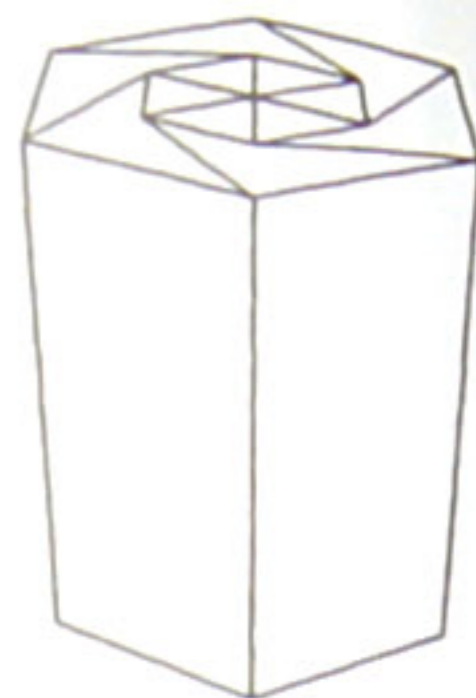
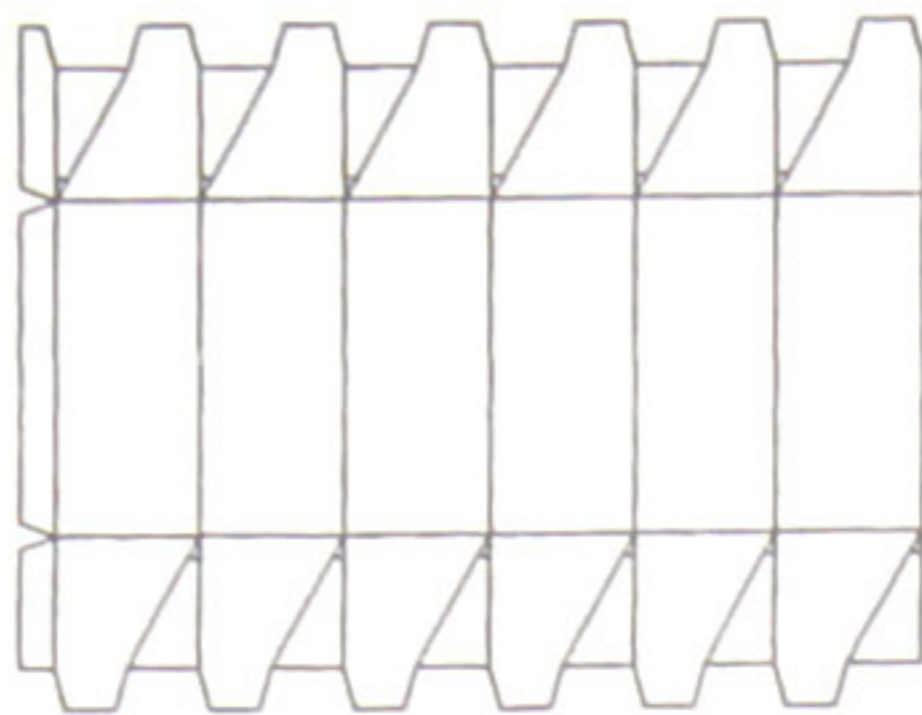


C 4021

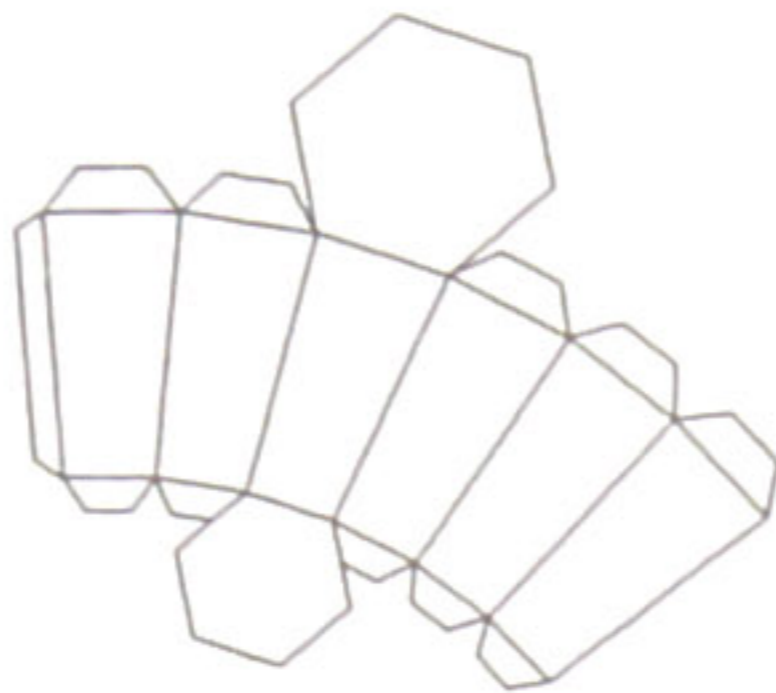


C 4060

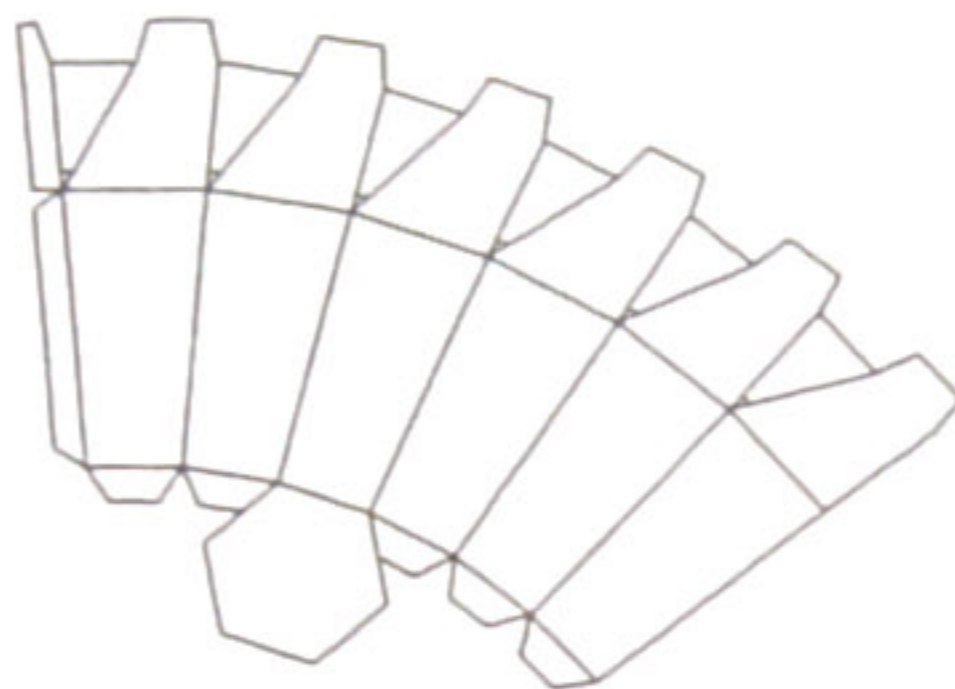
C 4080



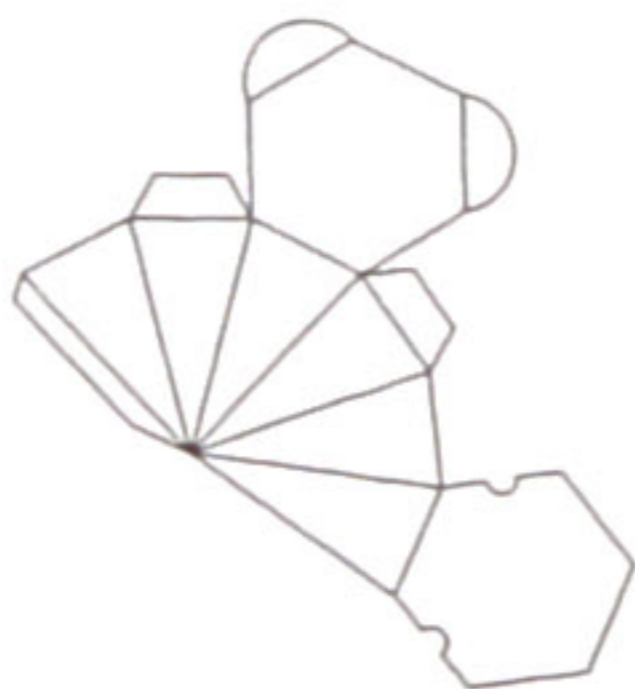
C 4110



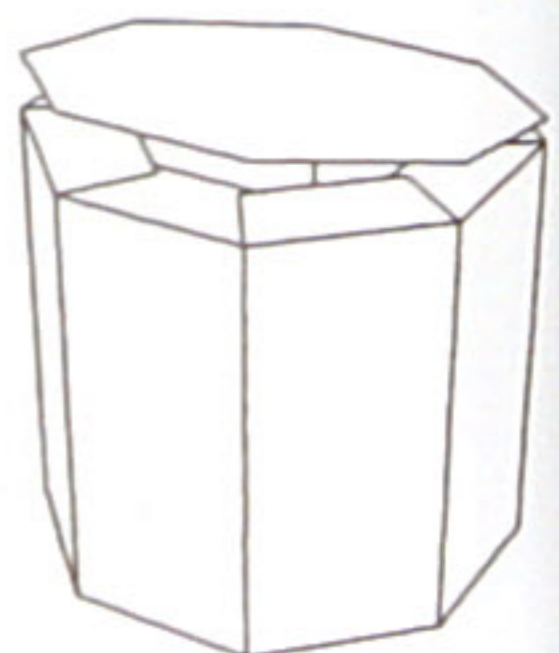
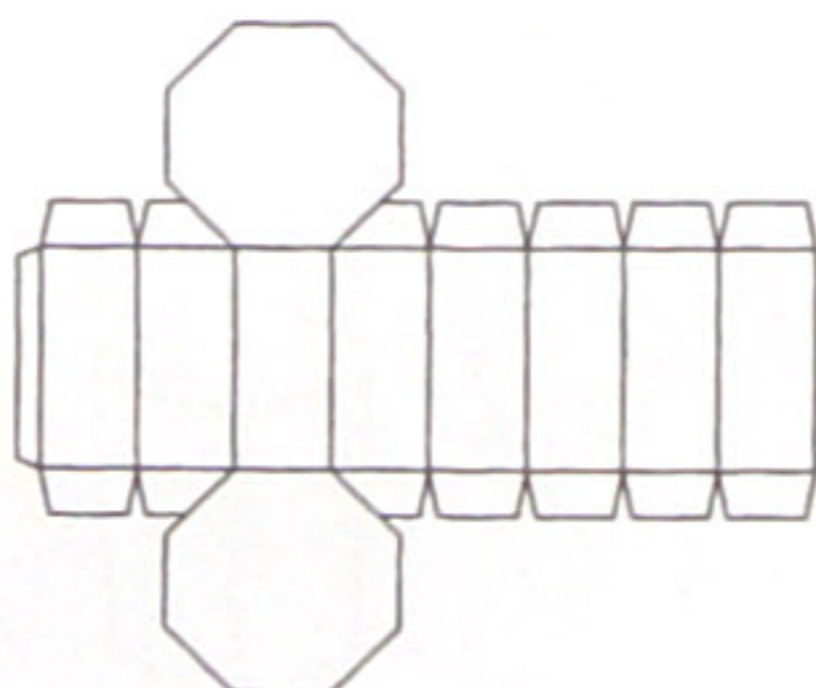
C 4180

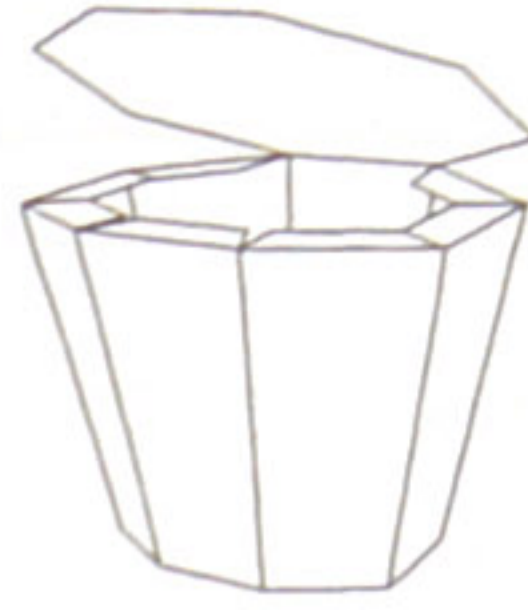
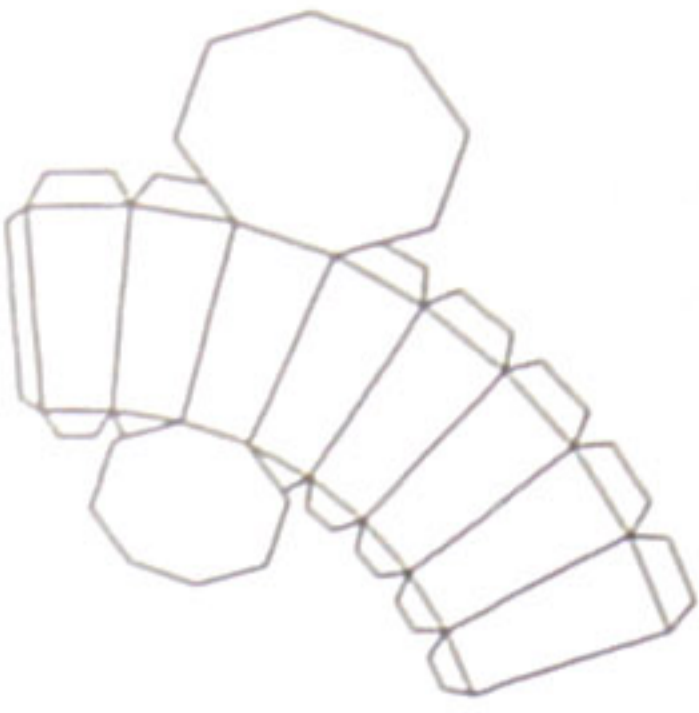


C 4220

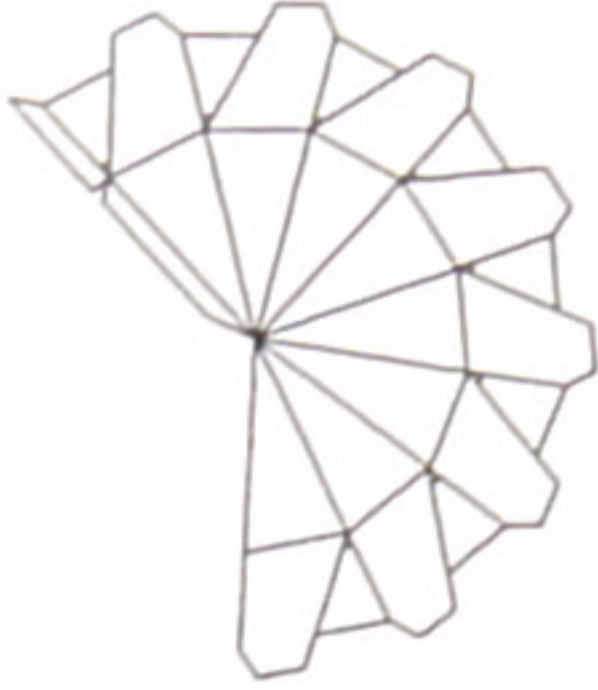


C 5010



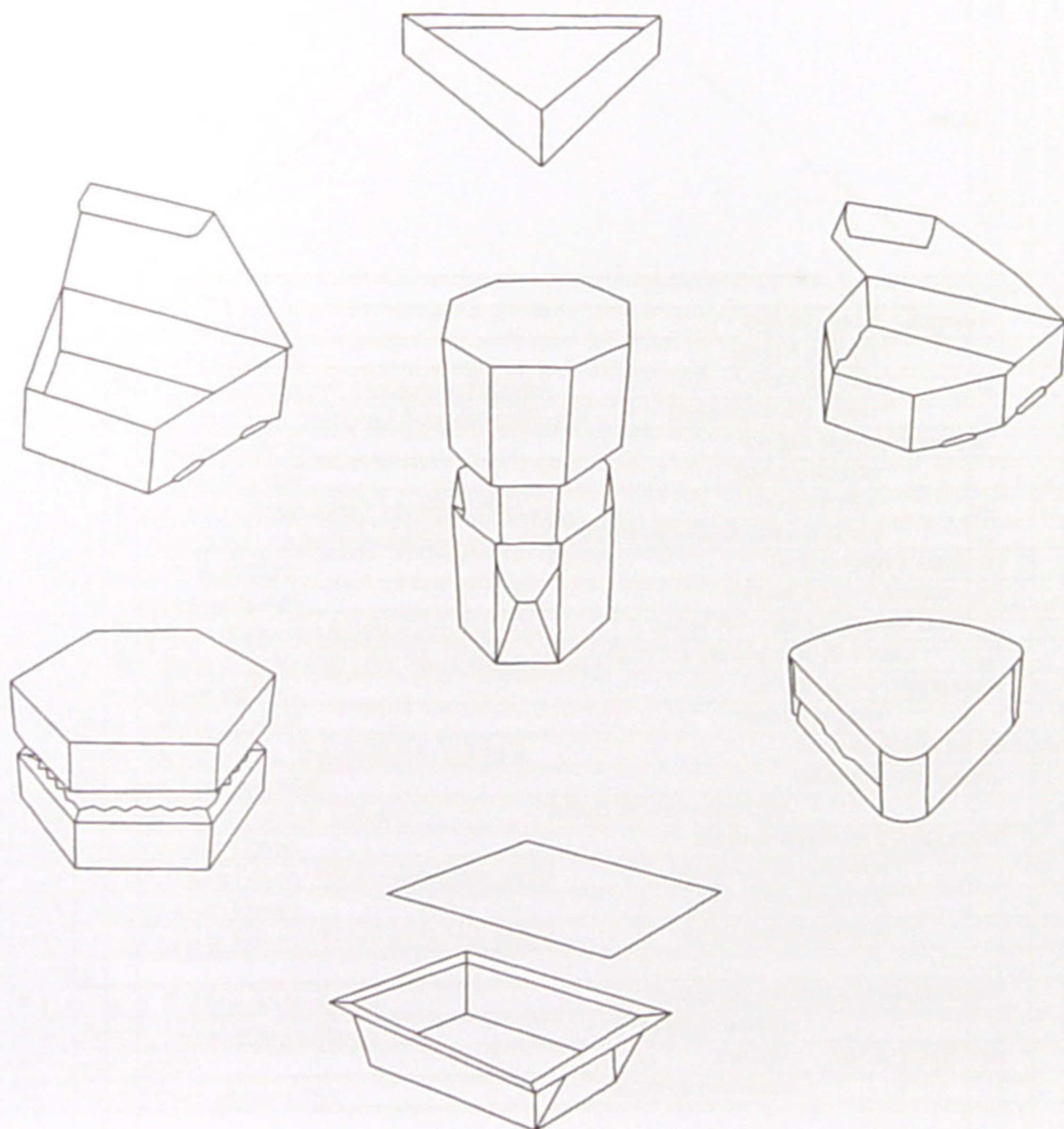


C 5111

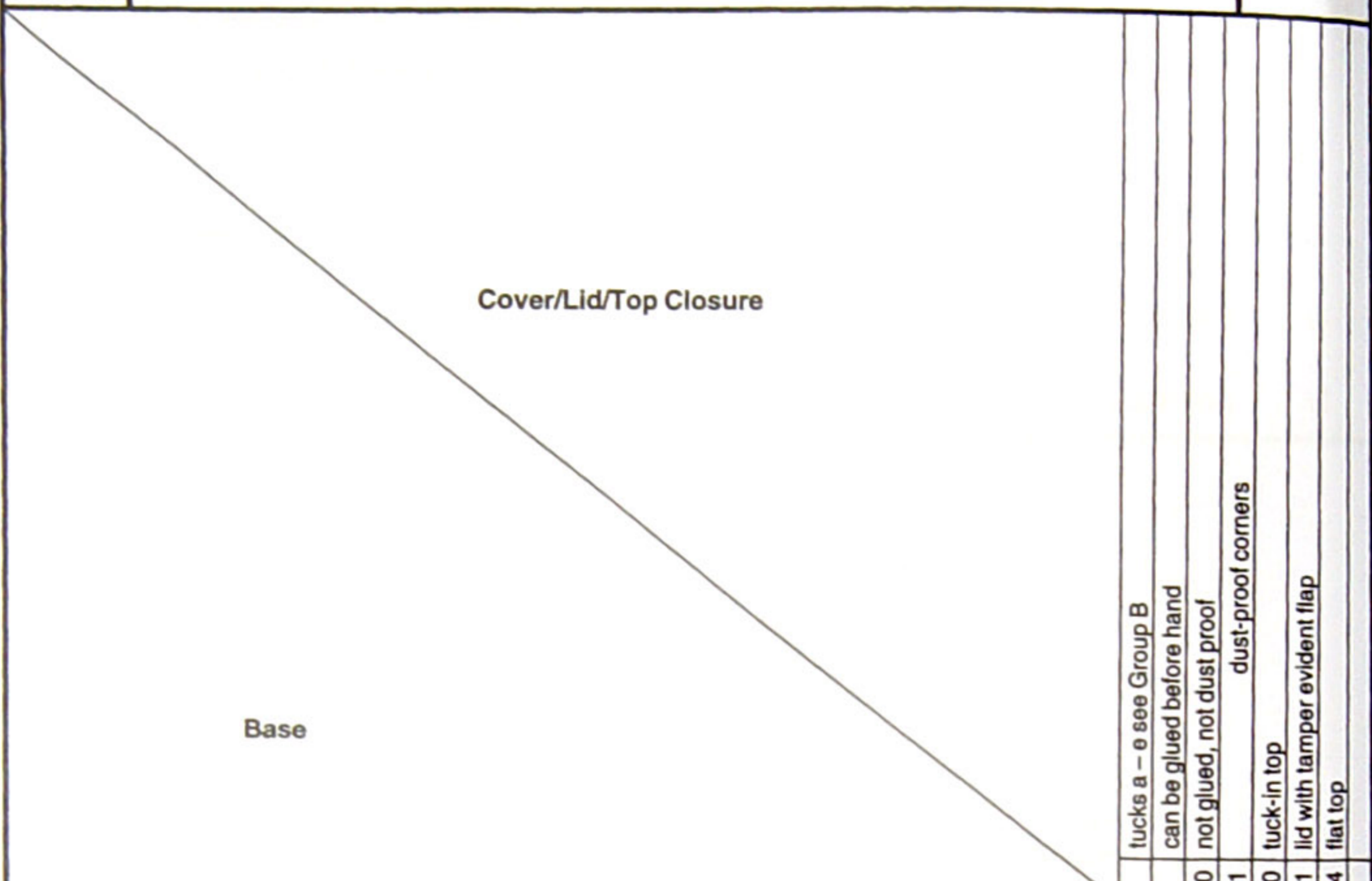


C 5280

- D Folding cartons with non-rectangular surfaces, non-long seam glued
- D Faltschachteln nicht-rechteckig ohne Längsnahtklebung, gefaltet
- D Boîtes pliantes aux surfaces non rectangulaires sans patte de collage latérale
- D Cajas plegables de superficies no rectangulares sin solapa de encolado lateral
- D Scatole con una o più facce non-rettangolari senza lembo d'incoll. laterale, piegati





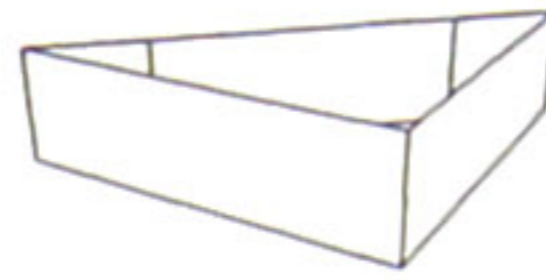
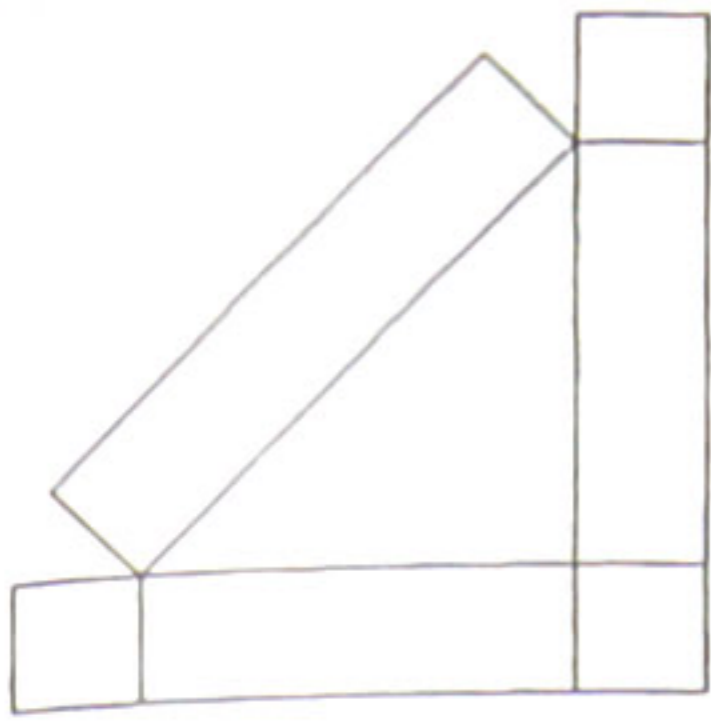


		tucks a - e see Group B	can be glued before hand	not glued, not dust proof	dust-proof corners	tuck-in top	lid with tamper evident flap	flat top
		-	-	10	11	50	51	54
X	Tray (base or top)							
10	triangular, single walled			X	X	●	●	
11	double walled			X	X			
12	with tuck-ins			X	X			
13	partly double walled	●		X	X			
20	trapezium, single walled	●		X	X	●	●	
21	double walled			X	X	●	●	
22	with tuck-ins		▲	X	X			
23	partly double walled with tucks	●		X	X			
30	6 sided, single walled	●	▲	X	X	●	●	
31	hexagonal, double walled			X	X	●	●	
32	6 sided, double walled with tucks		▲	X	X			
33	partly double walled with tucks	●		X	X			
40	octagonal, single walled	●	▲	X	X	●	●	
41	double walled			X	X	●	●	
X	tray with attached lid single walled		▲	X	X			
50	triangular tuck in lid							
51	with dust flaps & zipper			X		●	●	
60	triangular, 3 rounded corners			X		●	●	
61	rounded back-panel			X		●	●	
62	2 rounded corners			X		●	●	
63	rounded back panel			X		●	●	
X	tray (base)					●	●	
70	without gluing edge single walled				X			
71	double walled				X			
72	with gluing edge, square		▲		X			●
73	rounded corners				X			●

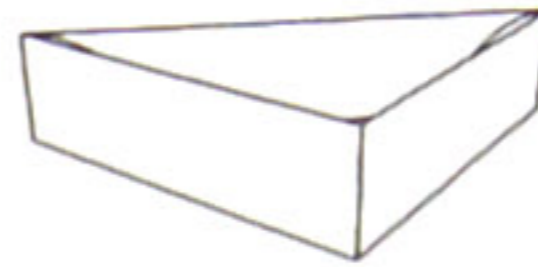
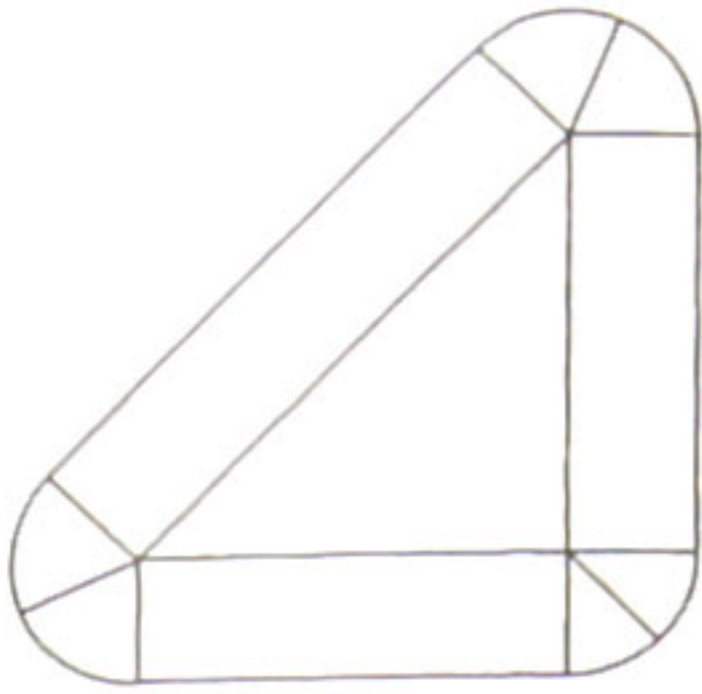
- Possible combinations
- X Design
- Present in sketch
- ▲ Alternative uses

**Warning:** for patents and other protective rights see introduction page i 3, letter B.

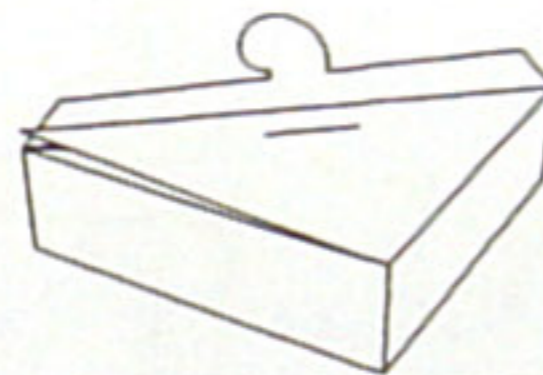
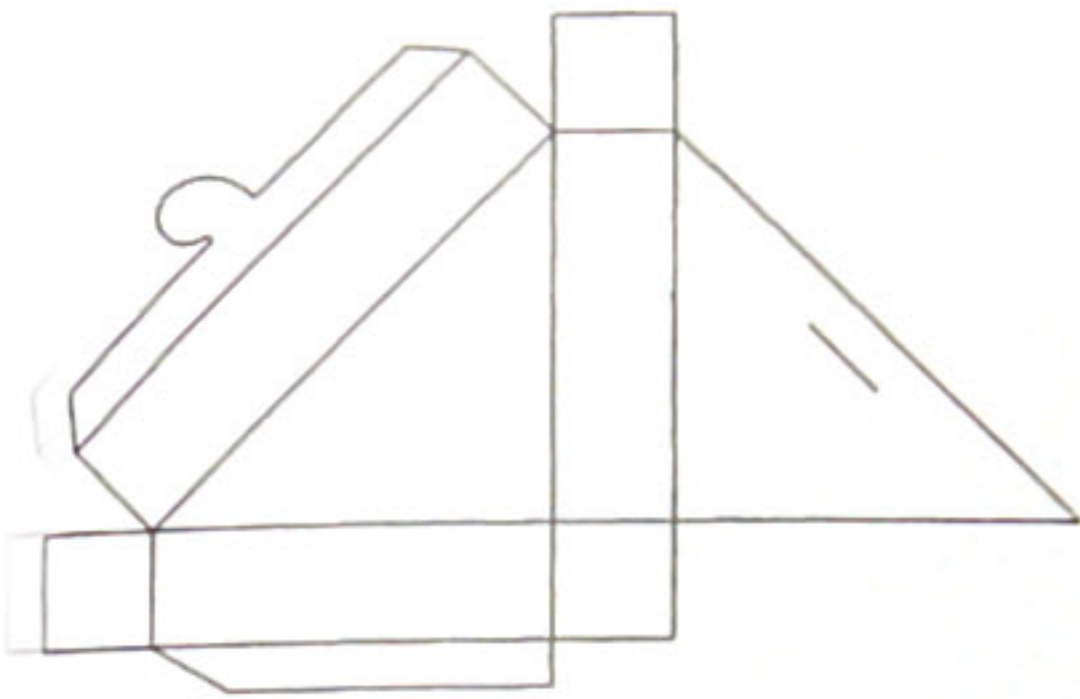
For special designs from D see Group F40.



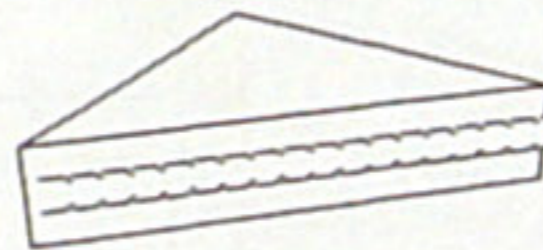
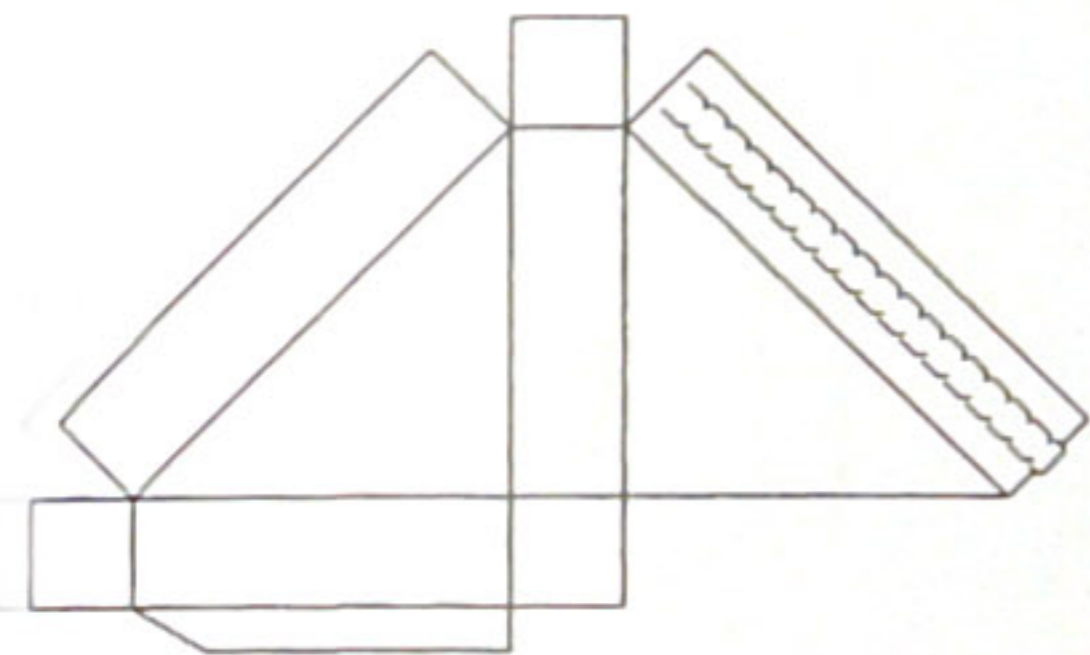
D 1010



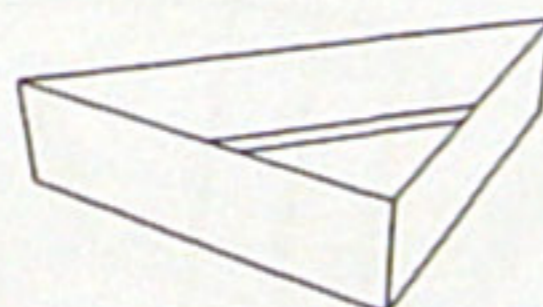
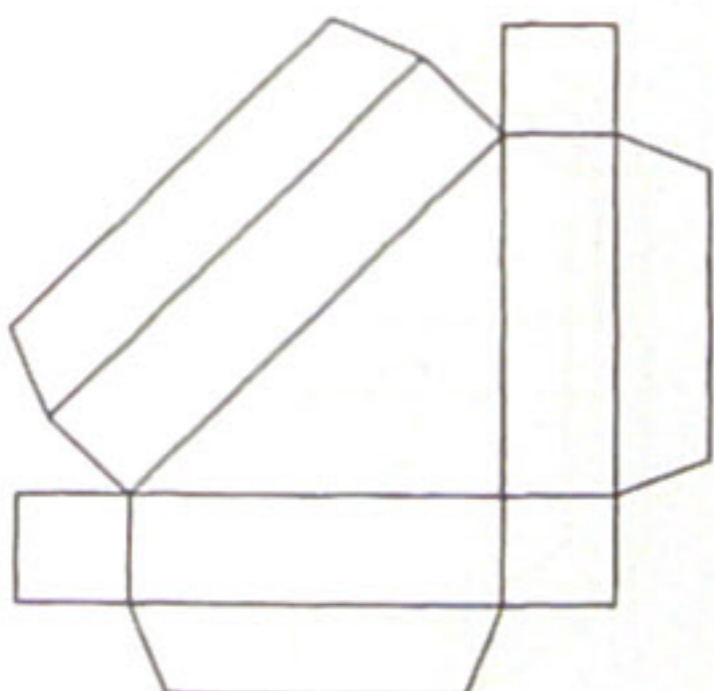
D 1011



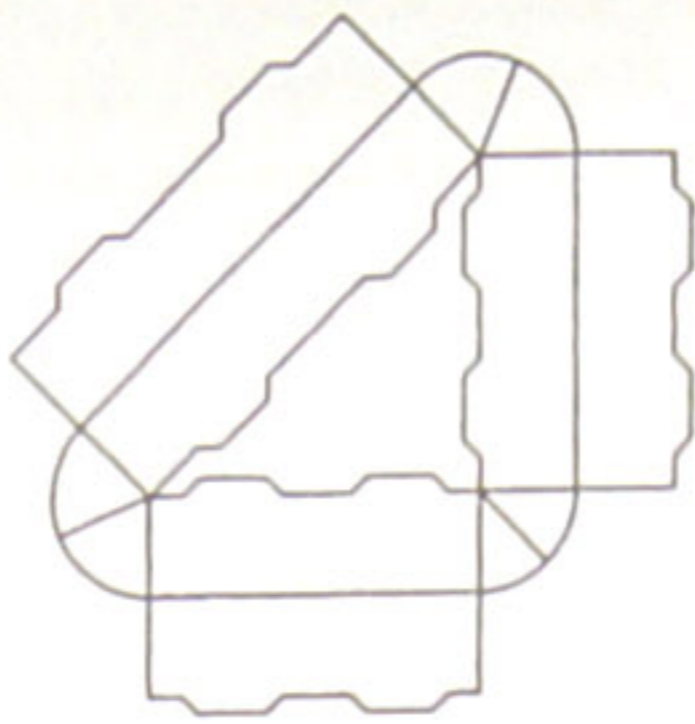
D 1050



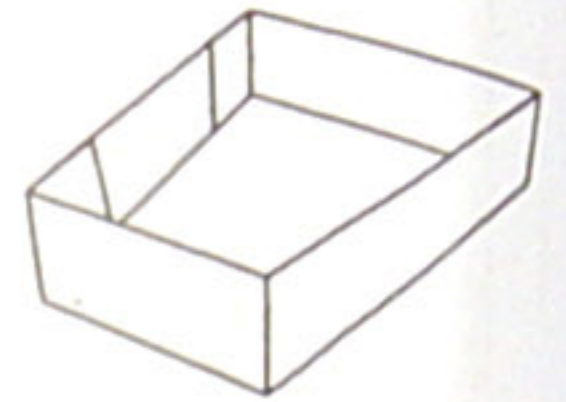
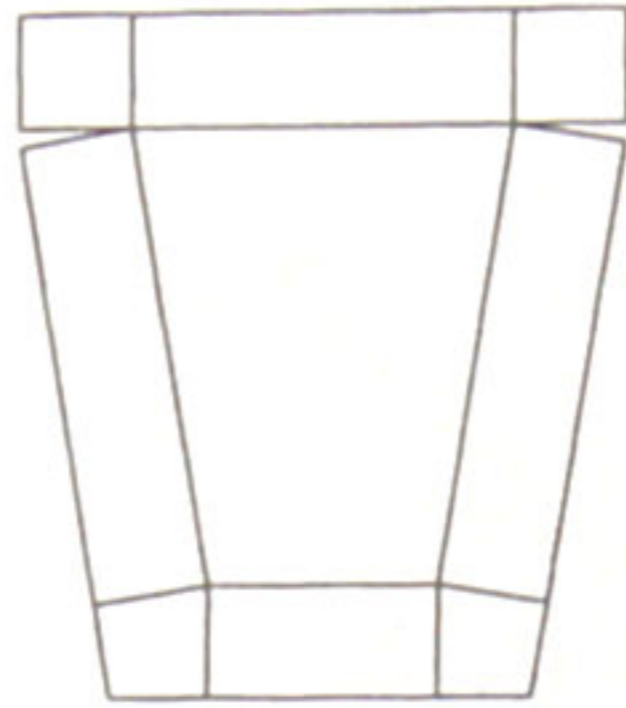
D 1051



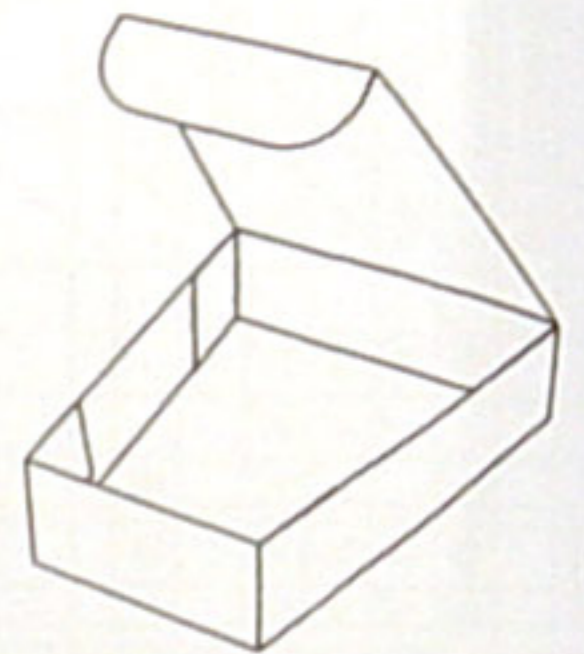
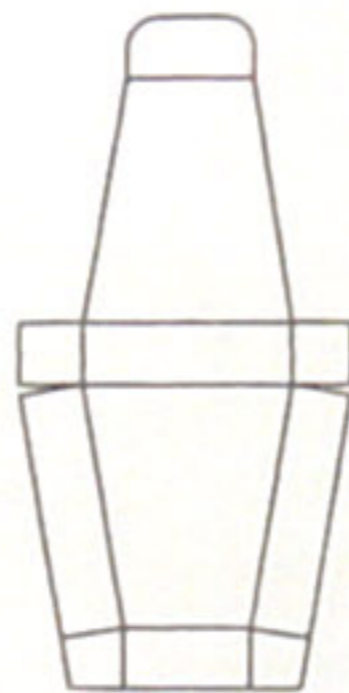
D 1110



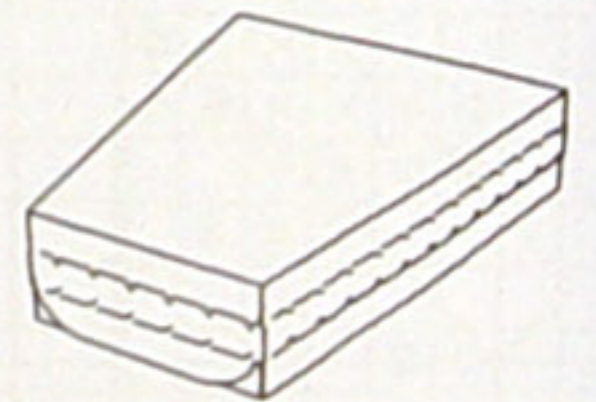
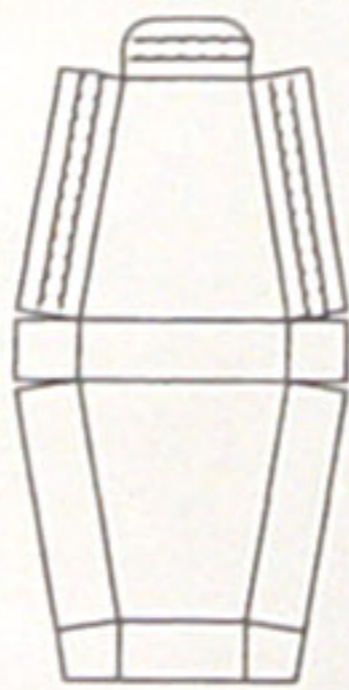
D 1211



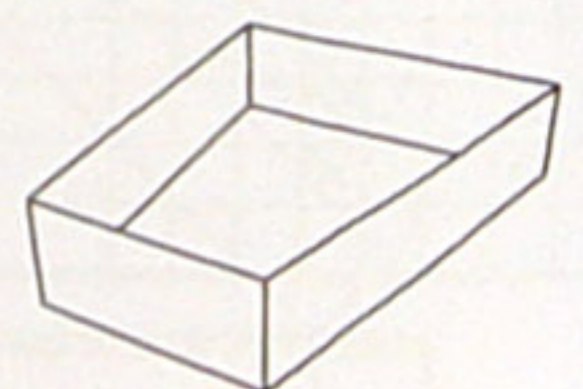
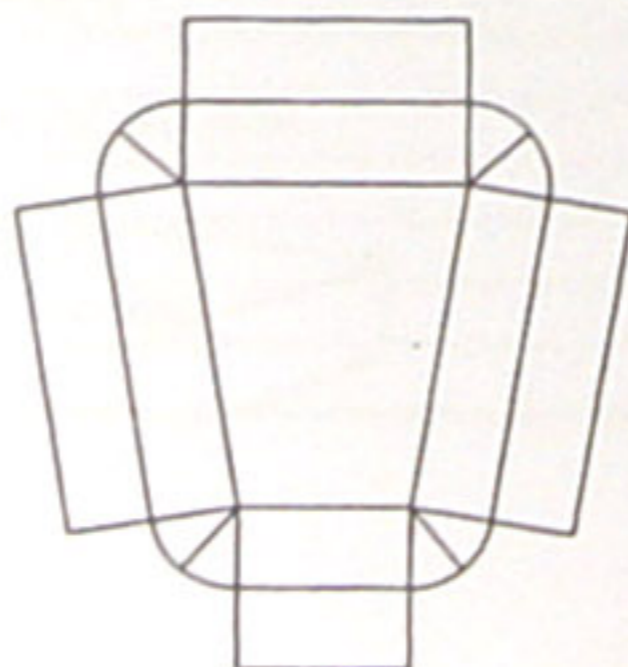
D 2010



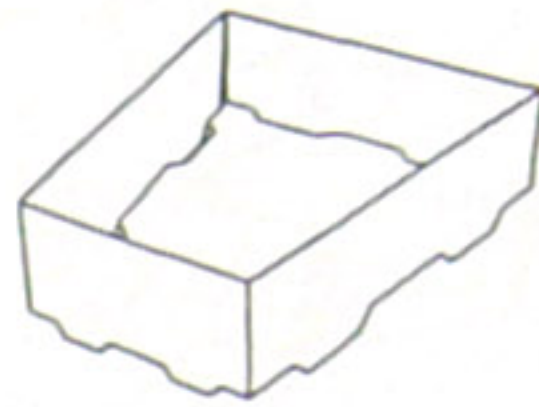
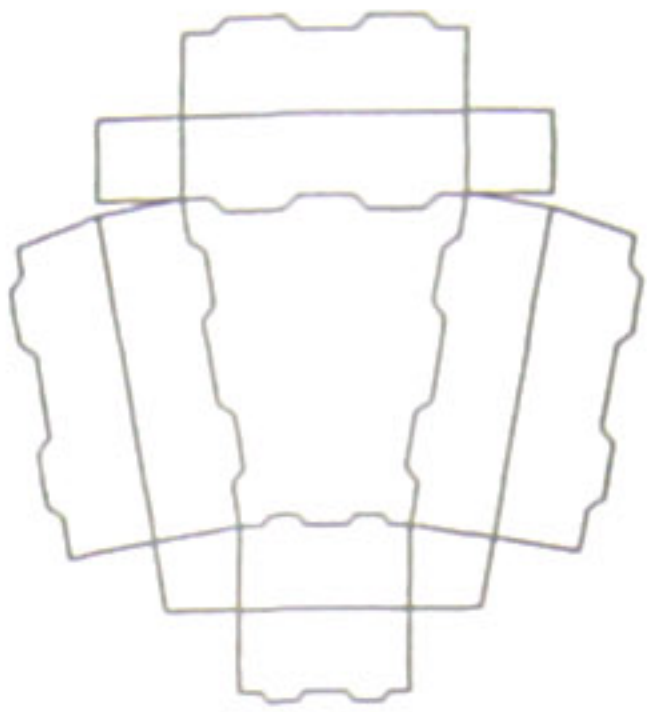
D 2050



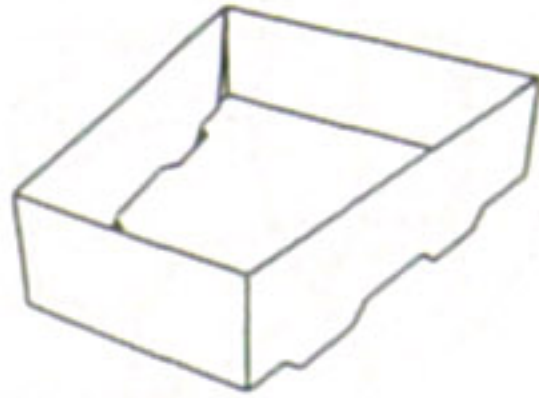
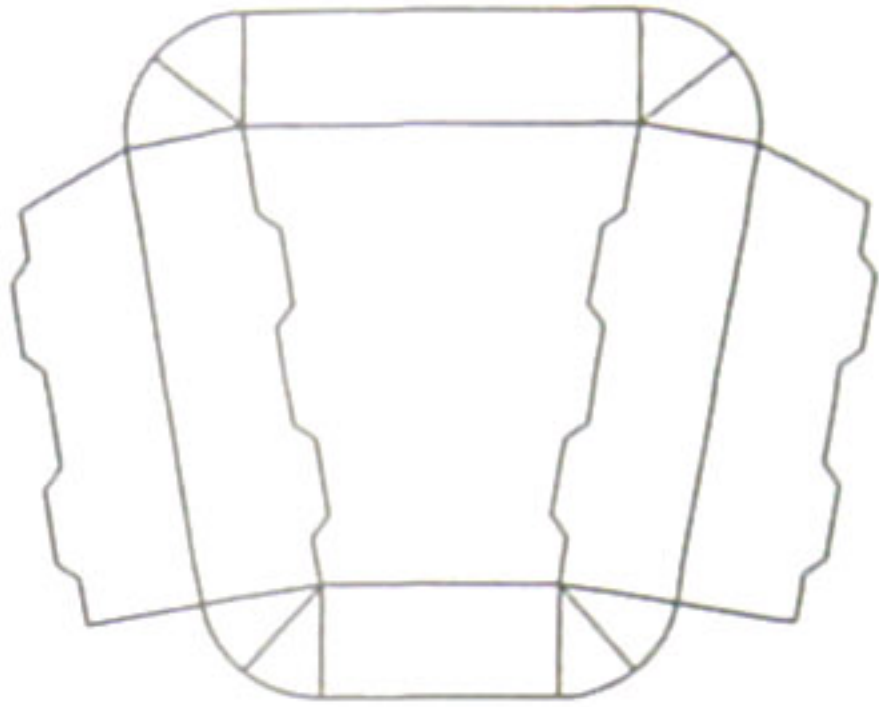
D 2051



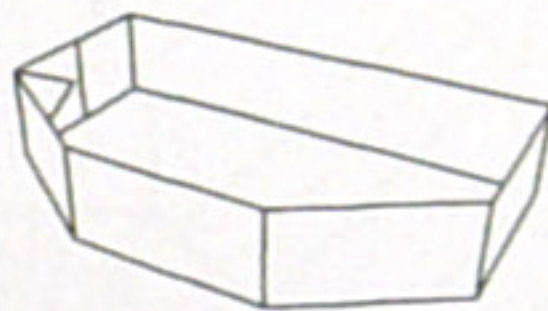
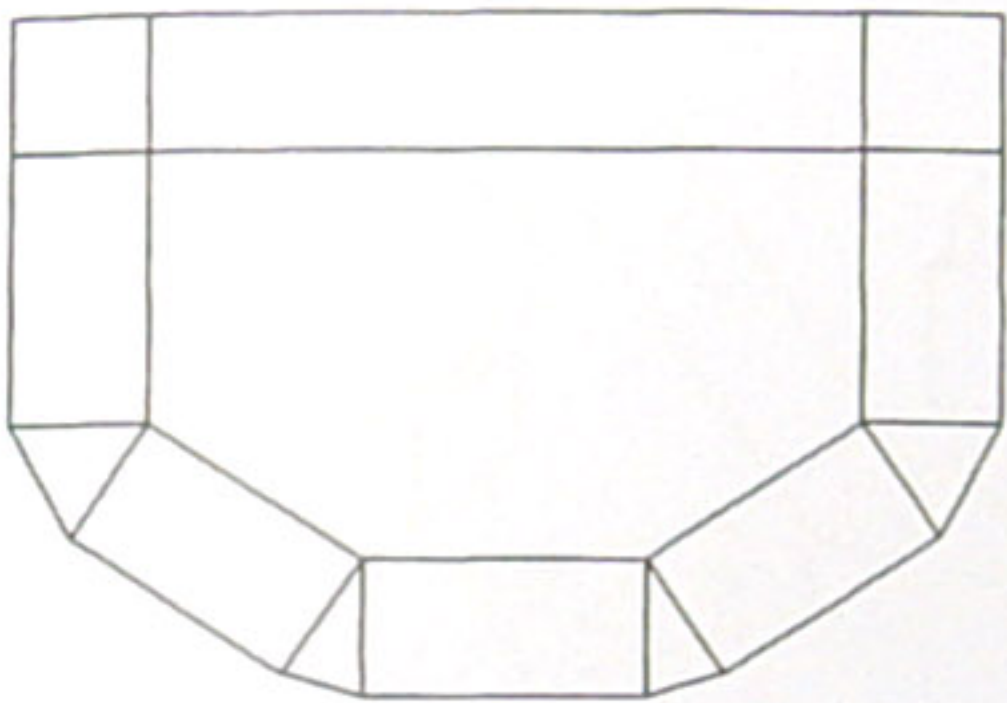
D 2111



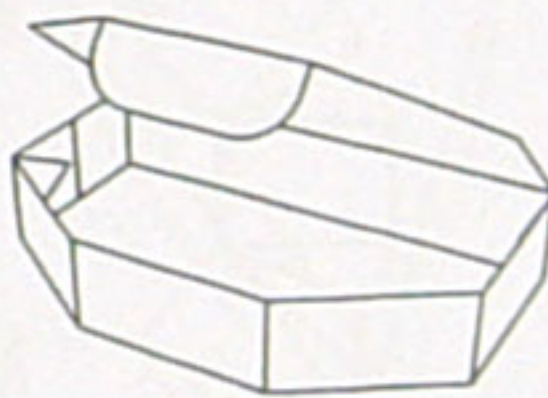
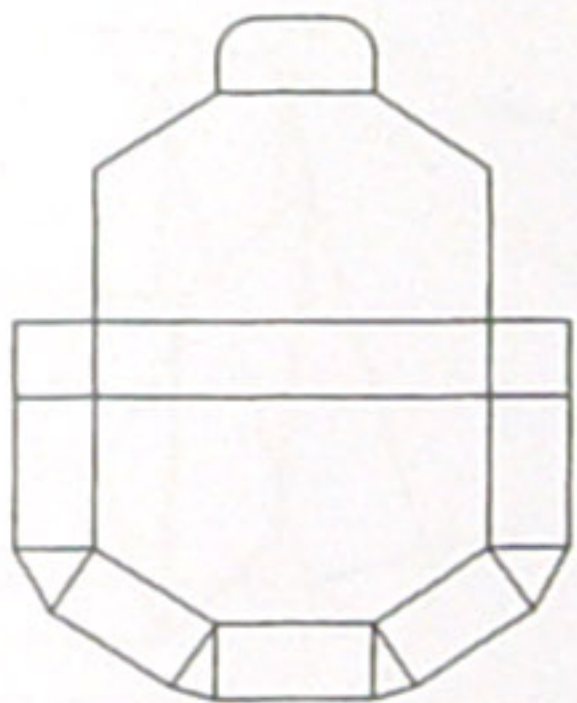
D 2210



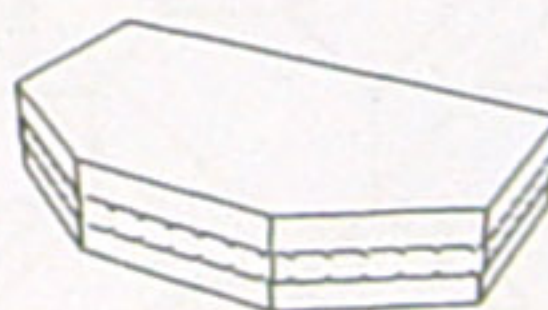
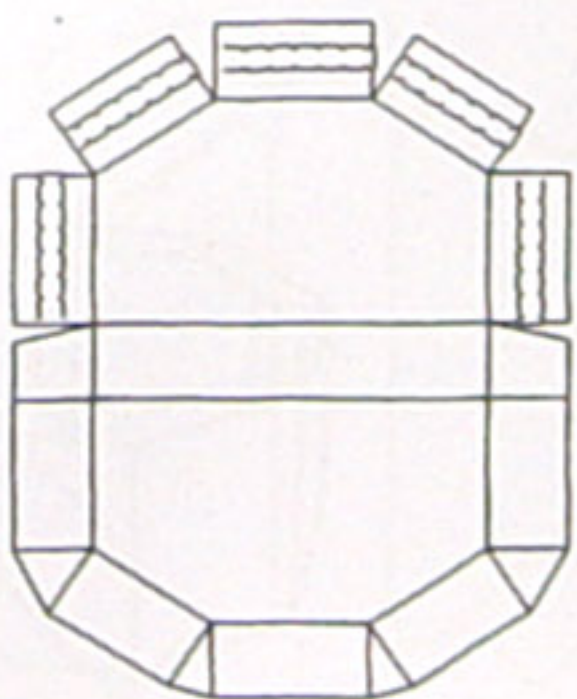
D 2311



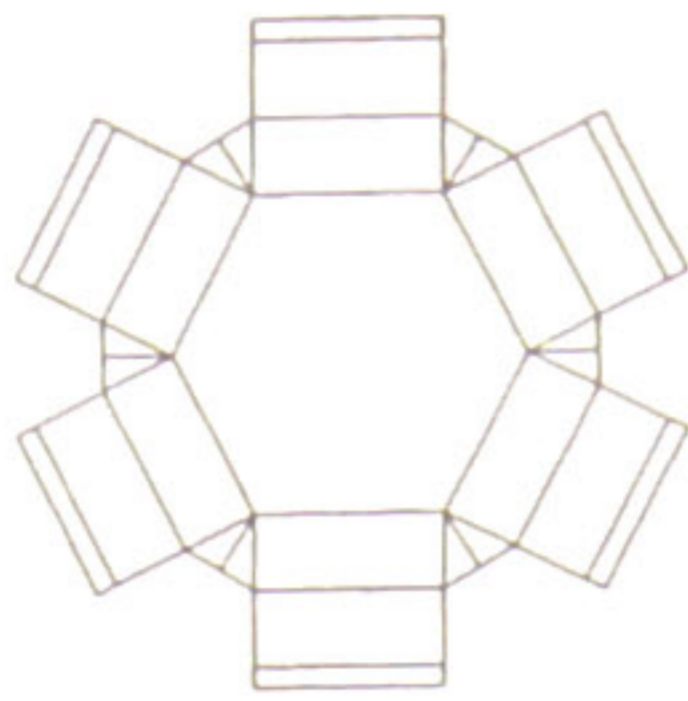
D 3010



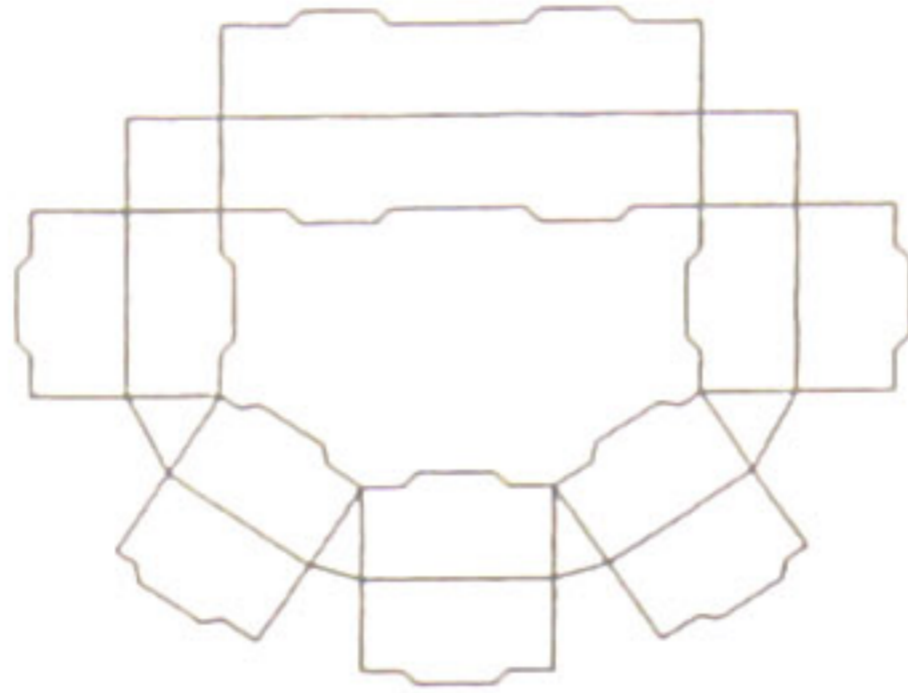
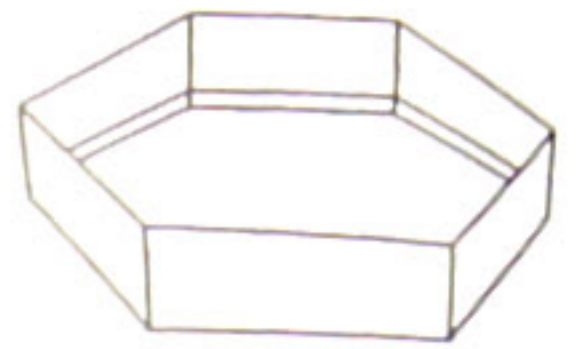
D 3050



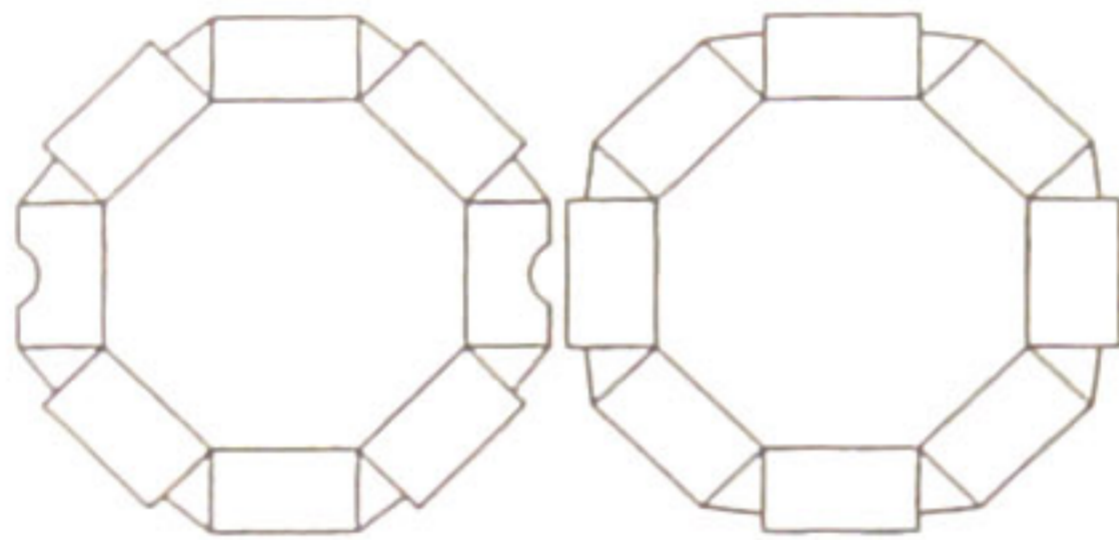
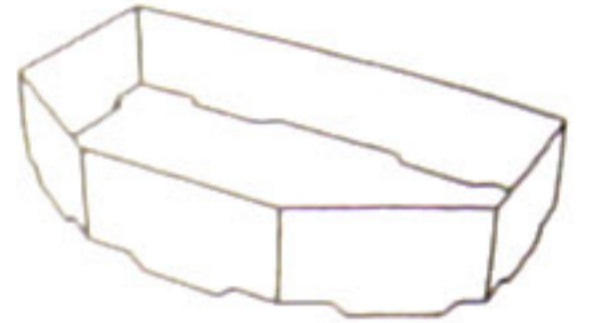
D 3051



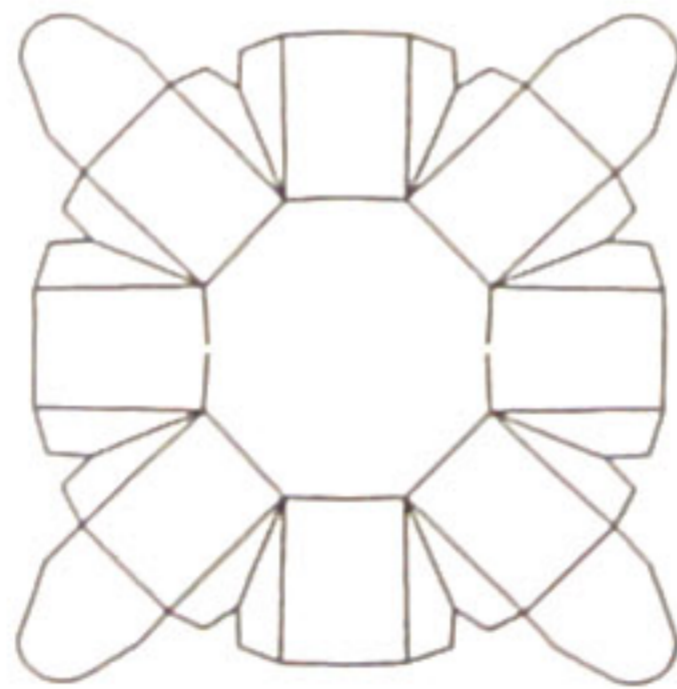
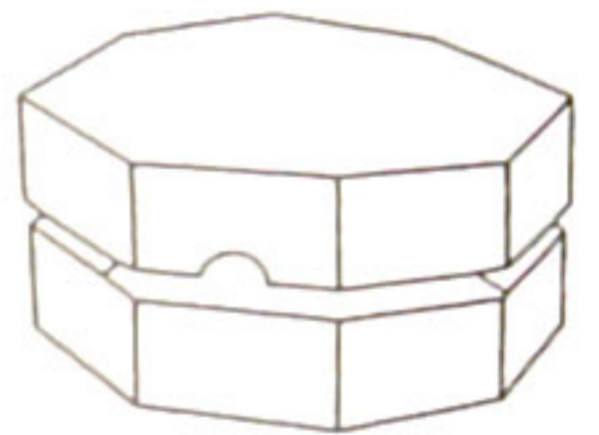
D 3111



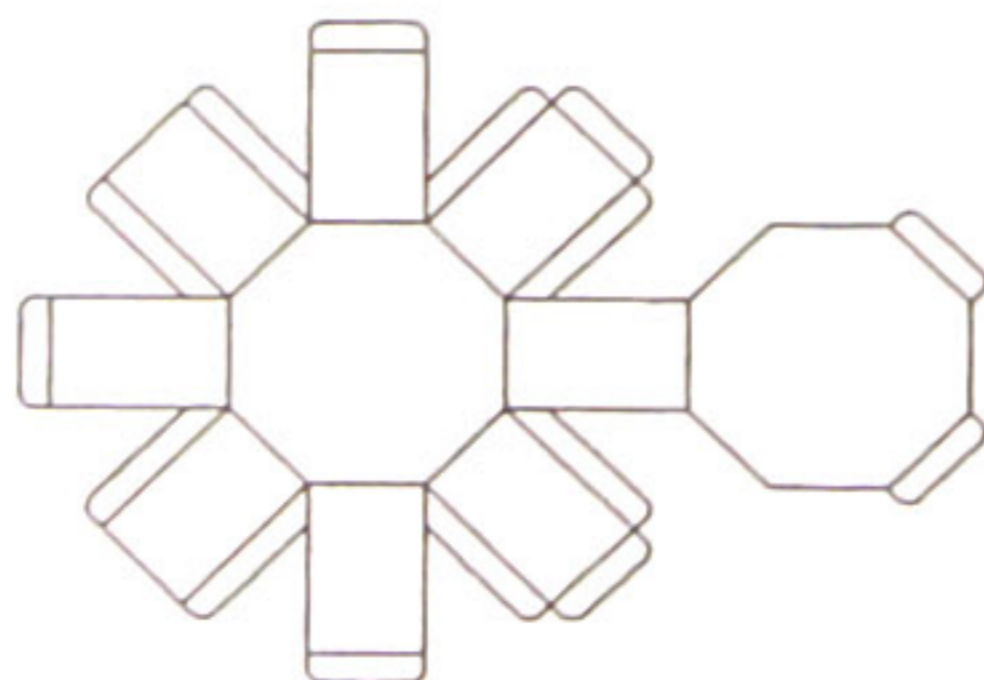
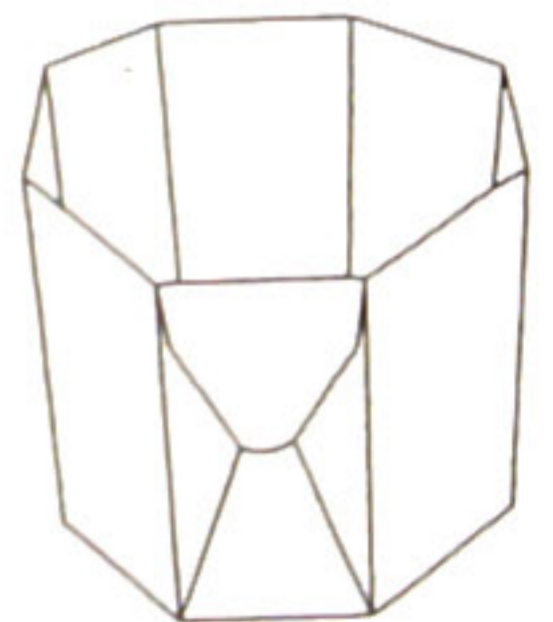
D 3210



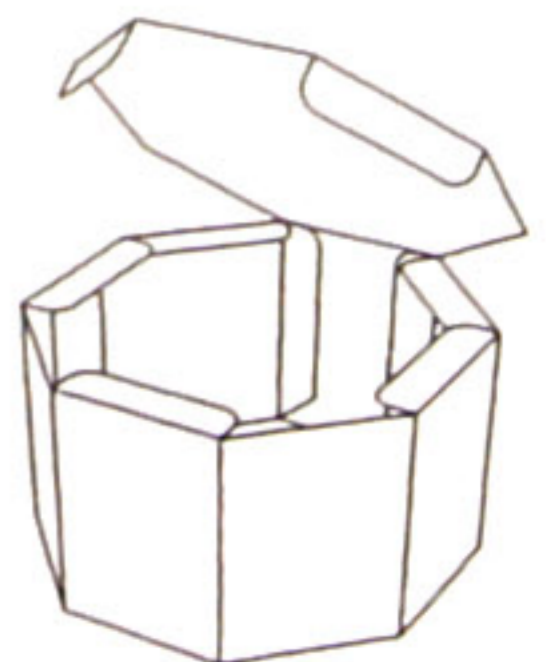
D 4010

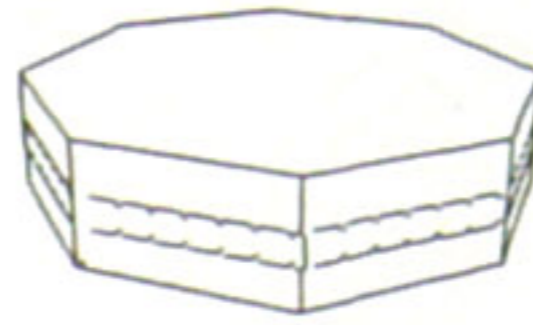
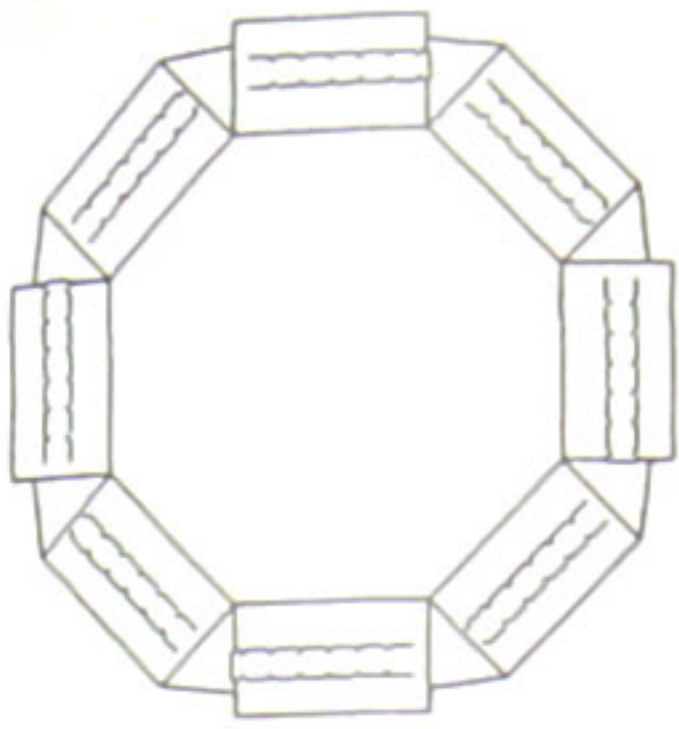


D 4011

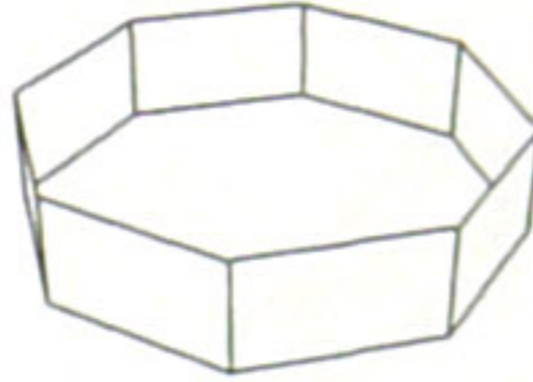
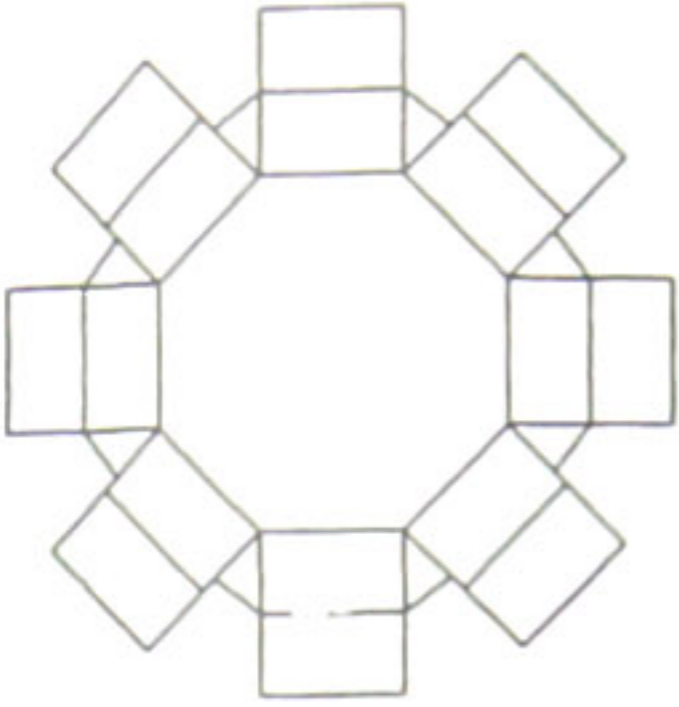


D 4050

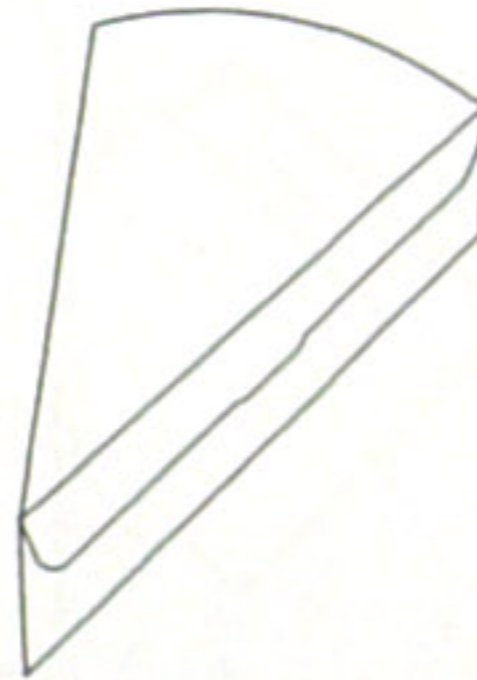
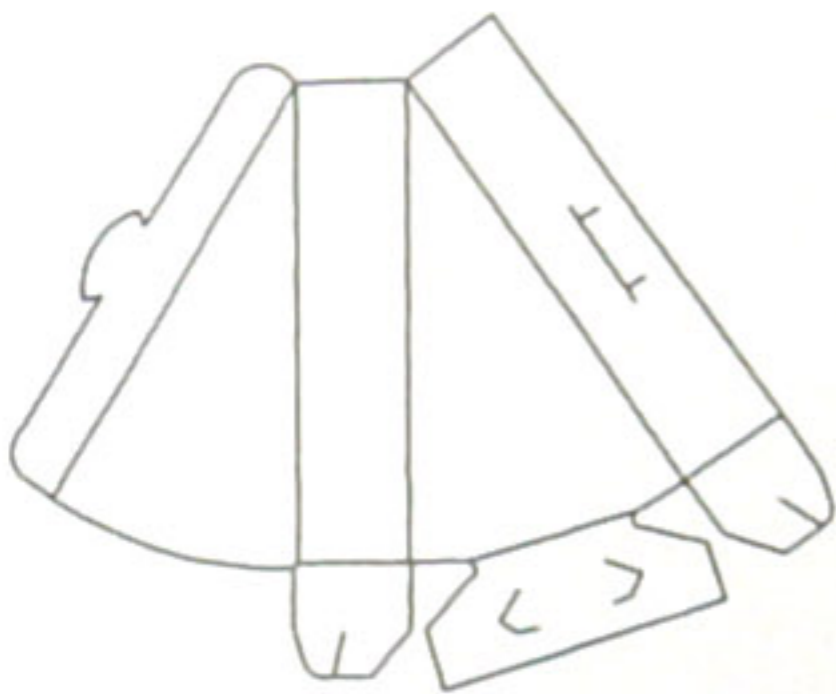




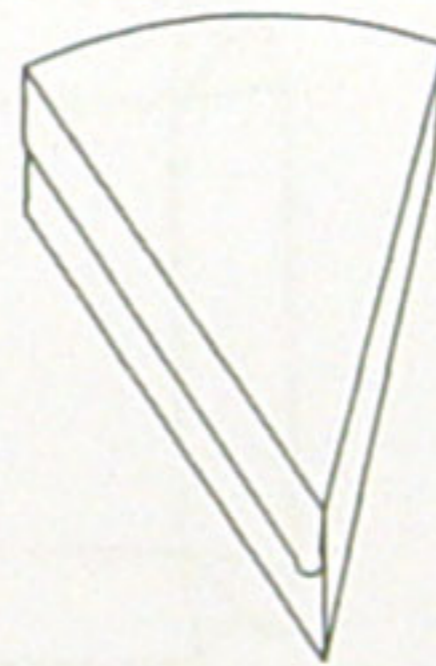
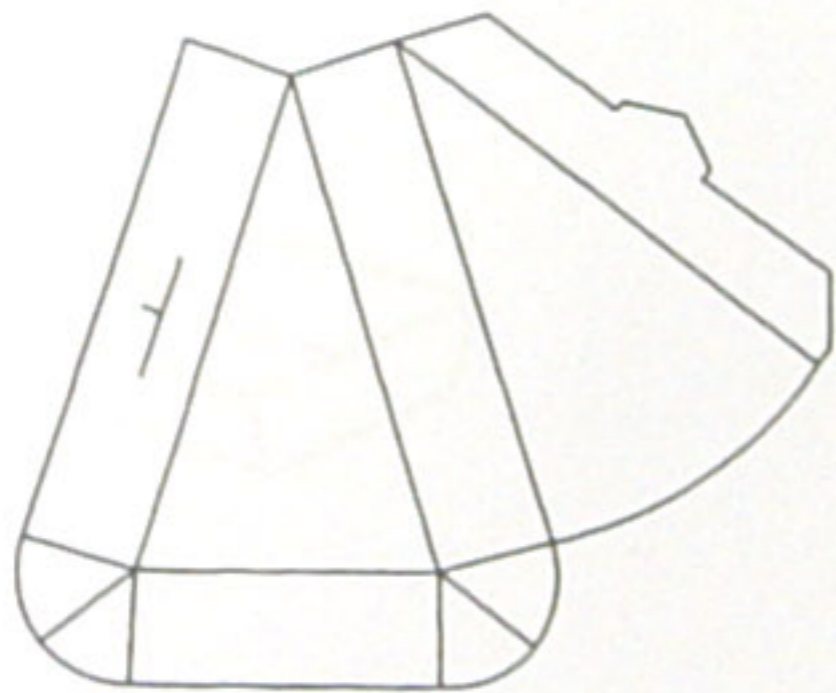
D 4051



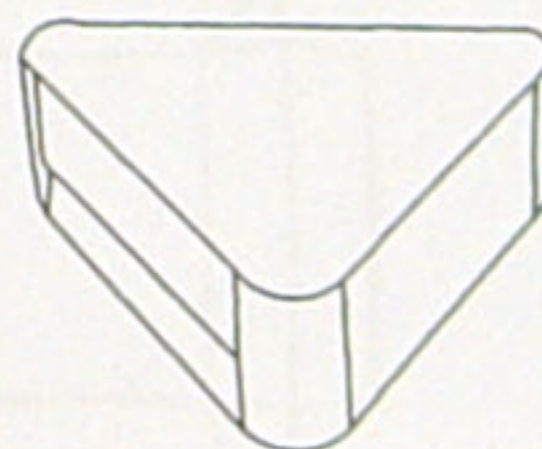
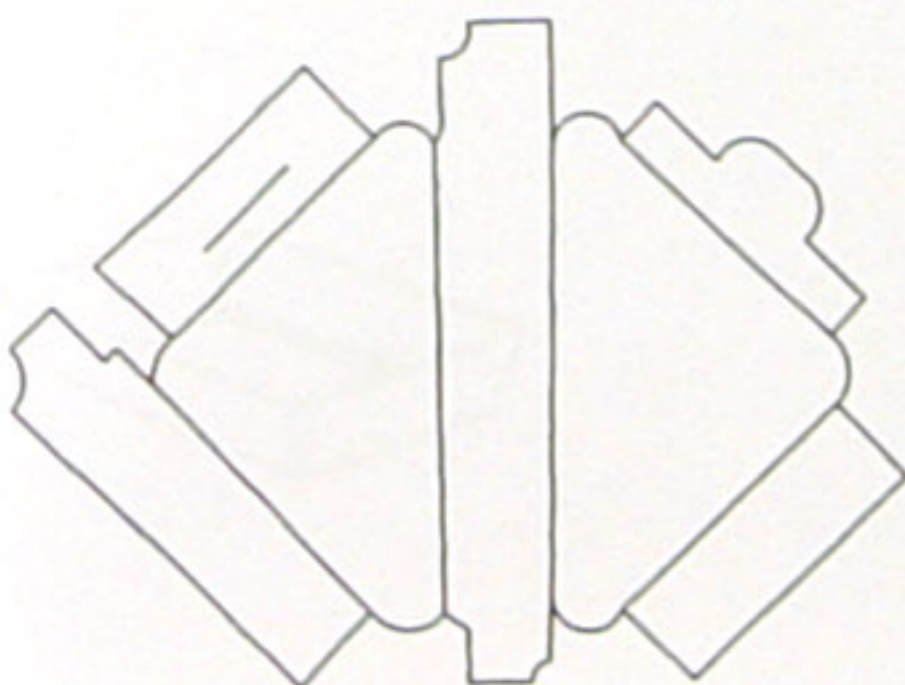
D 4110



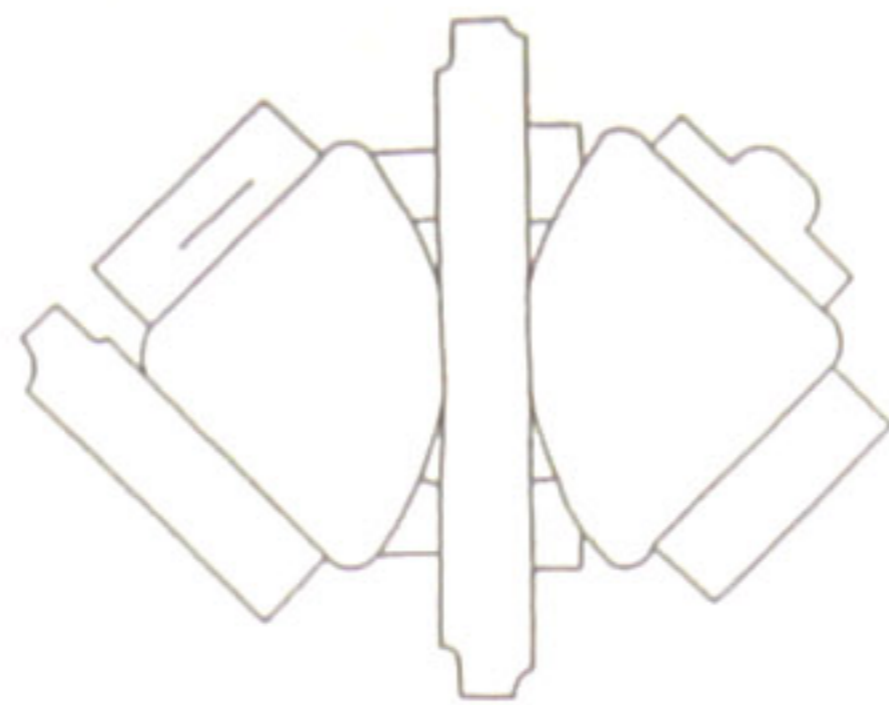
D 5010



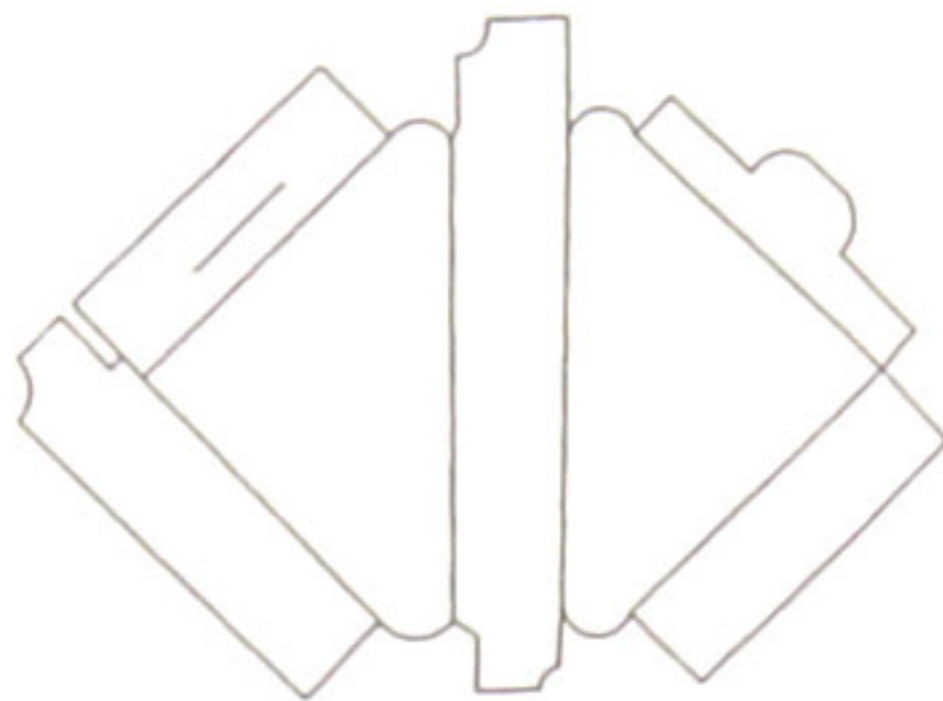
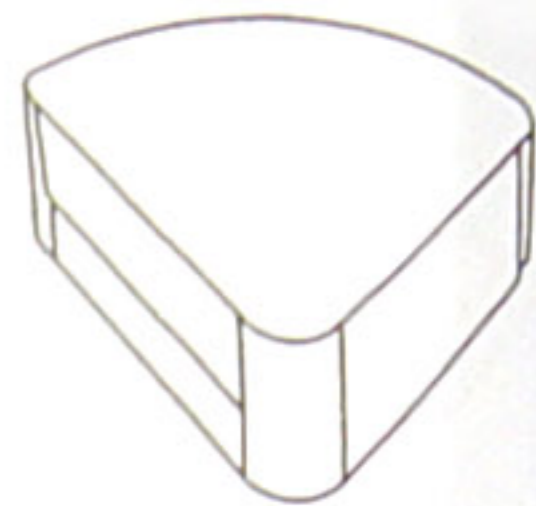
D 5110



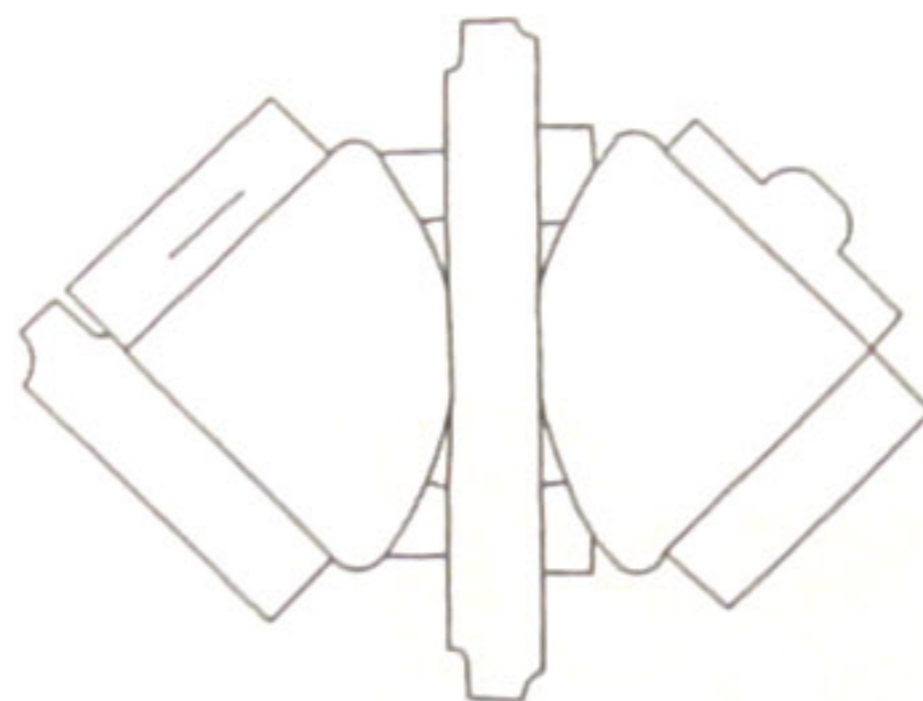
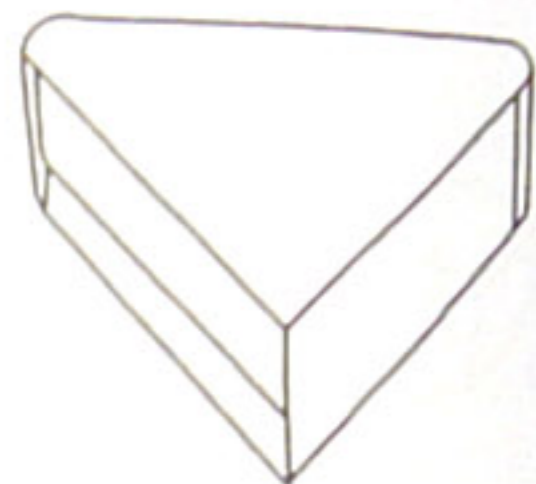
D 6010



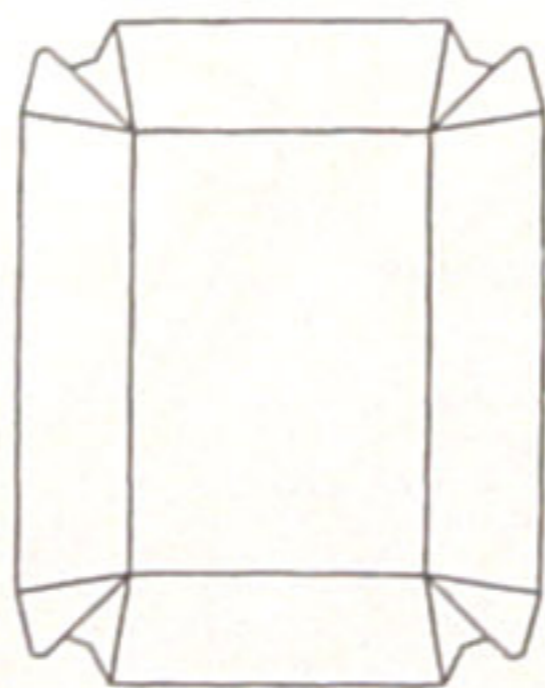
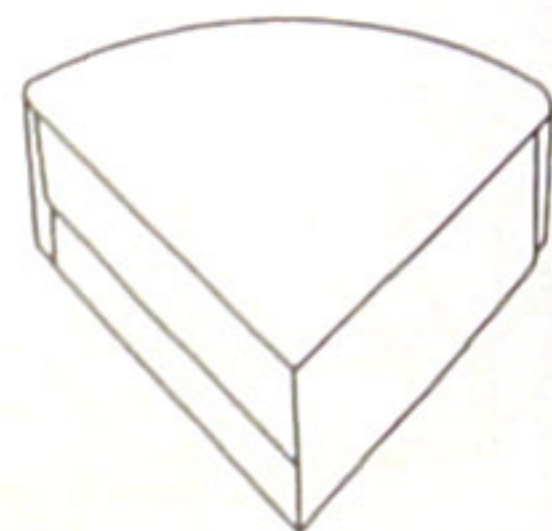
D 6110



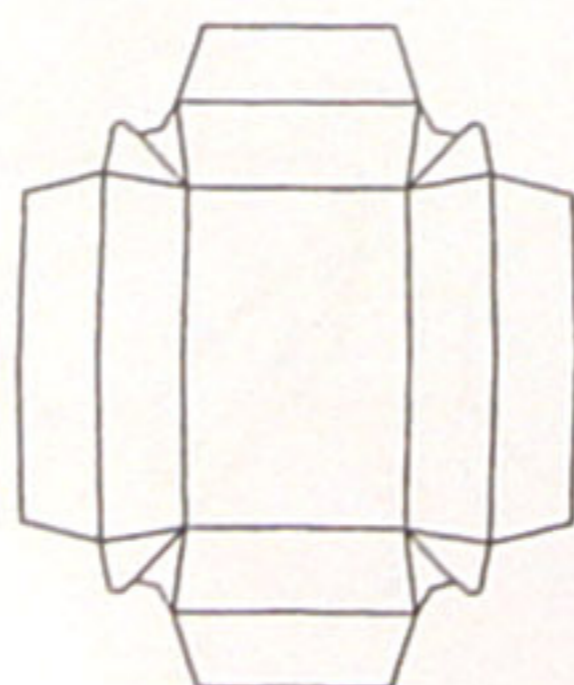
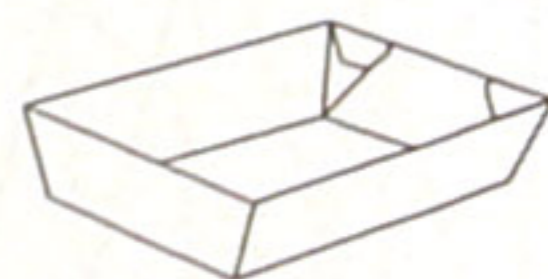
D 6210



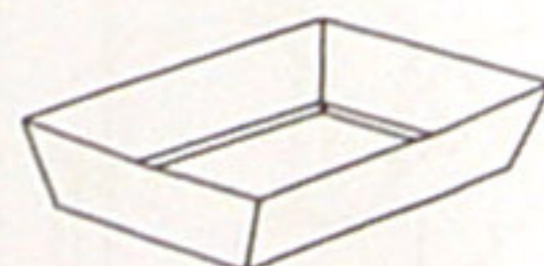
D 6310

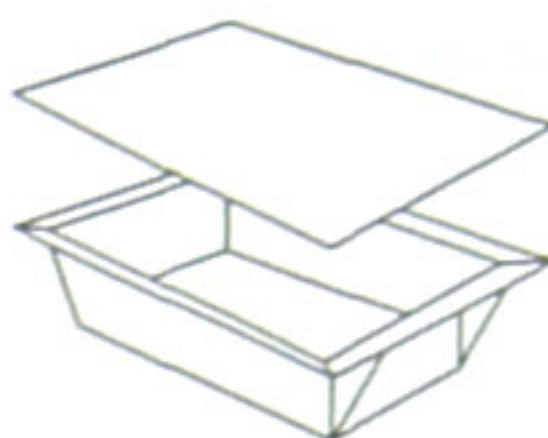
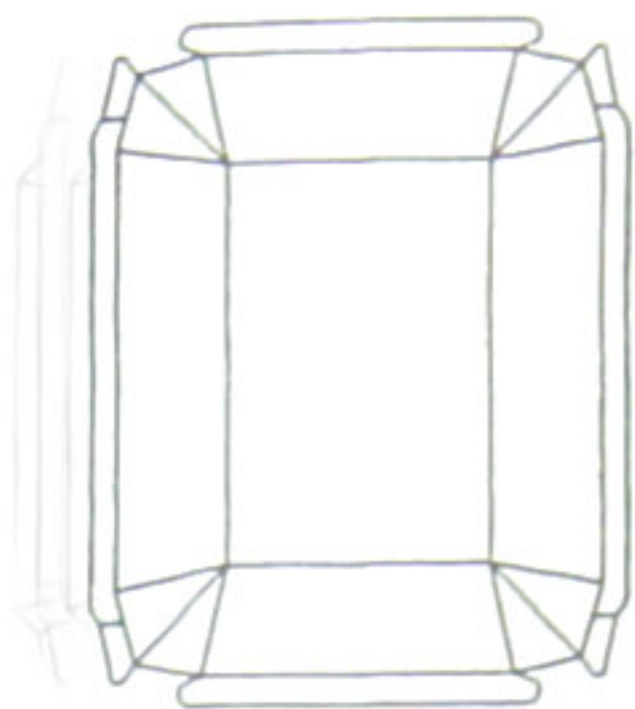


D 7011

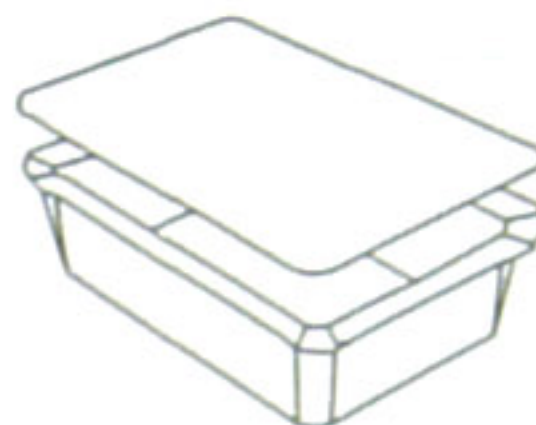
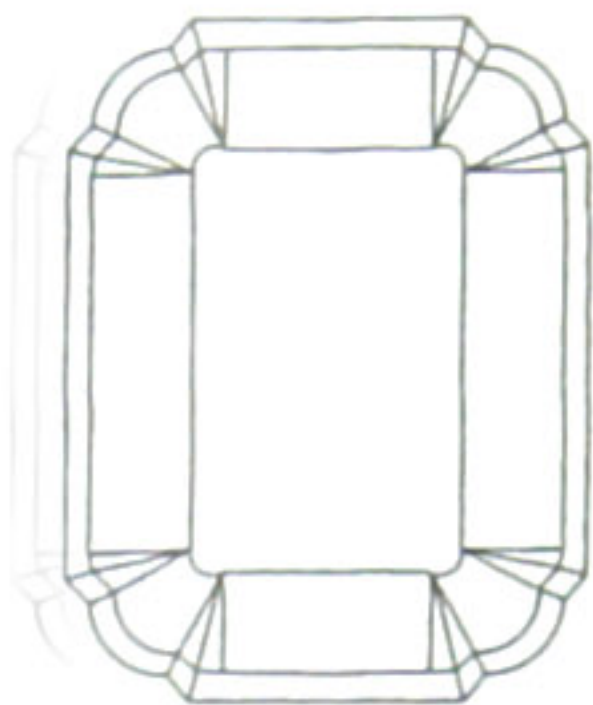


D 7111





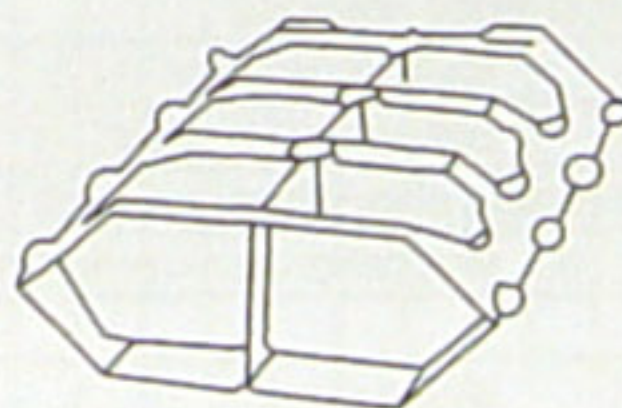
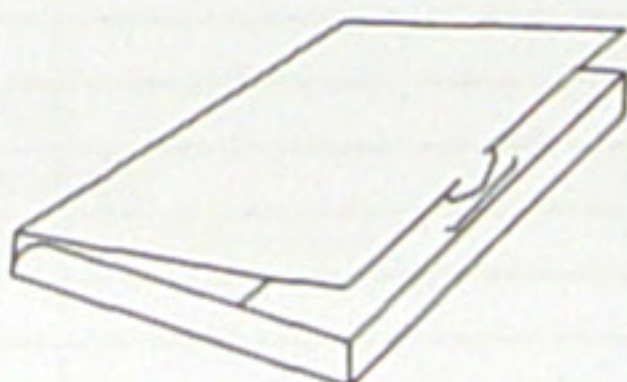
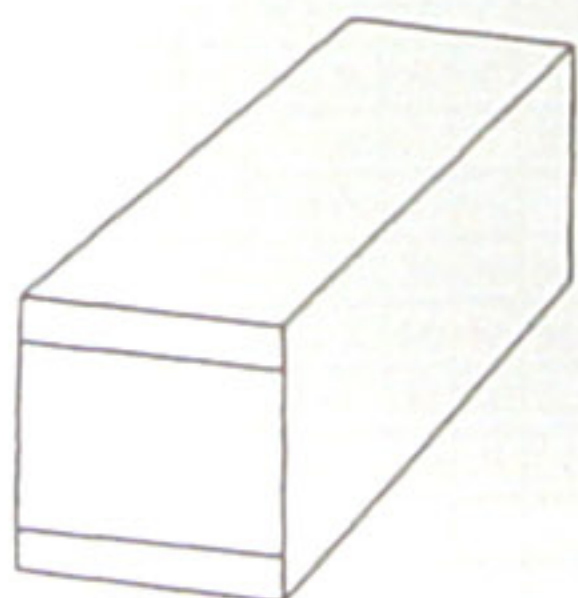
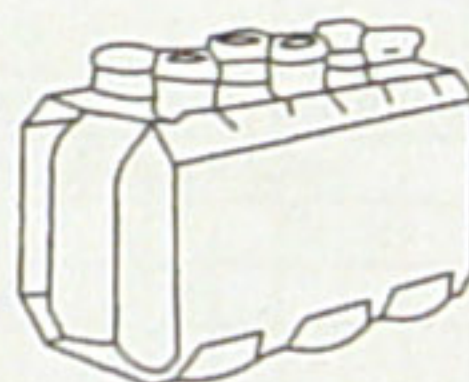
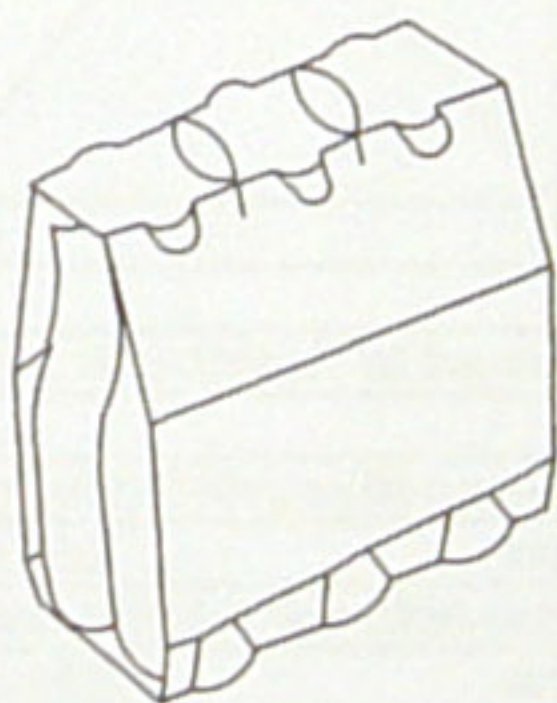
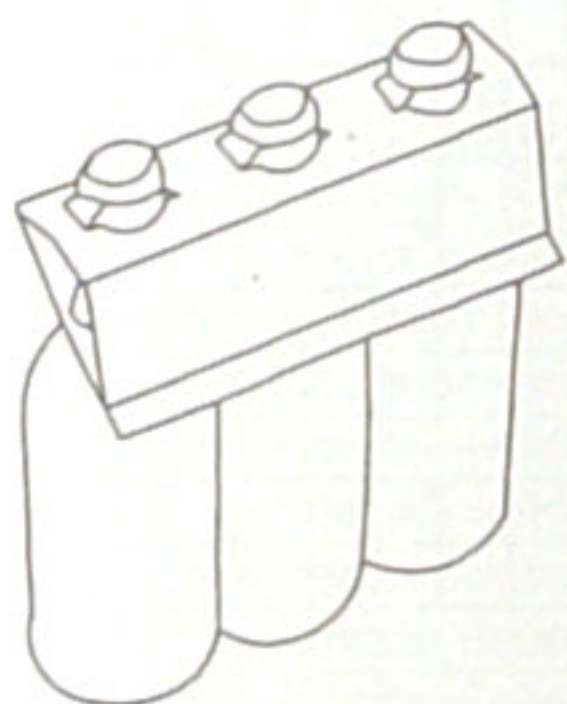
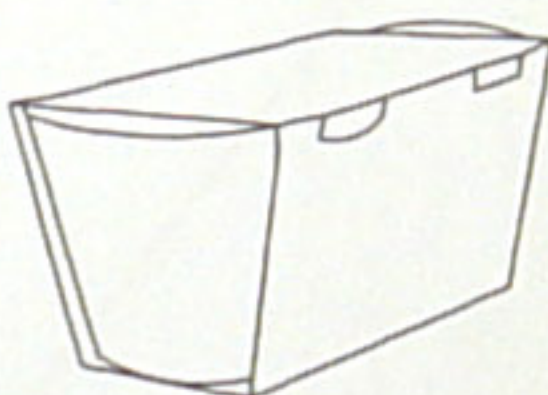
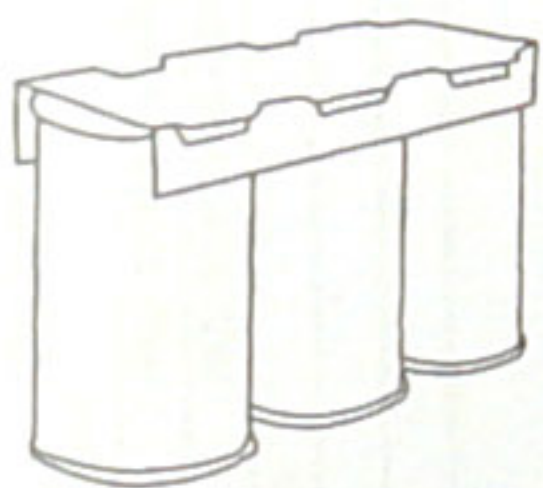
D 7211



D 7311



- E Product-integrated folding cartons
- E Faltschachteln mit Produktintegration
- E Boîtes pliantes avec produit intégré
- E Cajas plegables con producto integrado
- E Cartoncini a prodotto integrato



**Design**  
Glued in stacking machine / pre-glued by packaging manufacturer

**Product**

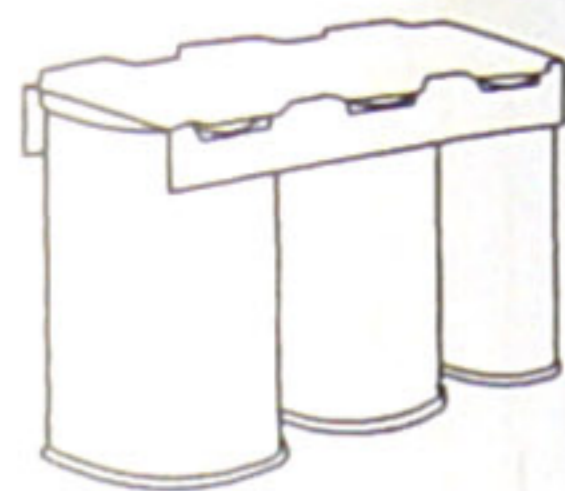
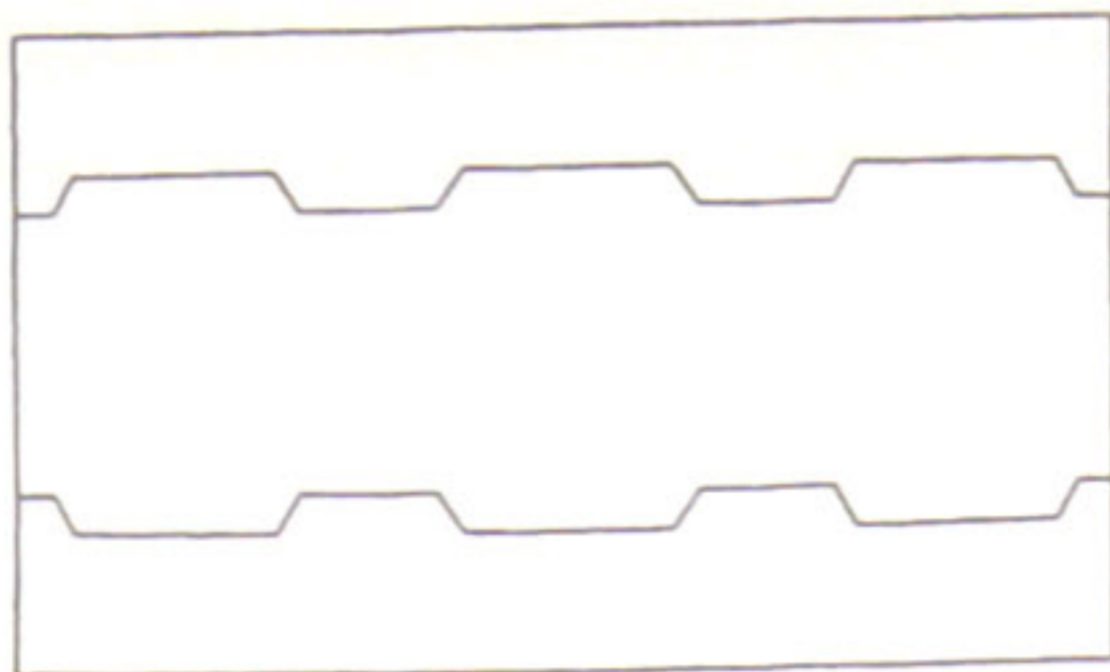
	10	11	20	21	22	30	31	32	40	41	50	55	80	81	82
	glued	locked in	glued sleeve	with open end panels	with carrying handle	locking in sleeve	with open side panels	with carrying handle	glued partial sleeve	locking in partial sleeve	pre-glued	inserted/tucked in	open	with handle lock & eyes	with tuck-in flap
<b>X cylindrical products (tins, beakers, glasses)</b>															
10 vertical panels, single row		X	X	X		X	X								
11 with recessed lid			X	X		X	X		X	X					
12 double row			X	X		X	X								
13 with recessed lid			X	X		X	X		X	X					
14 panels not vertical, single row		X	X	X		X	X								
15 with recessed lid			X	X		X	X		X	X					
16 double row			X	X		X	X								
17 with recessed lid			X	X		X	X		X	X					
<b>X bottles</b>															
20 single row, flap/neck covered	X		X	X	X	X	X	X							
21 not covered	X		X	X	X	X	X	X							
22 double row, flap/neck covered	X		X	X	X	X	X	X							
23 not covered	X		X	X		X	X								
<b>X rectangular shapes covered</b>															
30 vertical panels			X	X	X	X	X	X							
31 not vertical panels			X	X	X	X	X	X							
<b>X bars, slabs (book, chocolate, record)</b>															
40 vertical or non-vertical panels											X		X	X	X
<b>X eggs</b>															
50 single row												X			
51 double row												X			

X Design  
 Present in the sketch

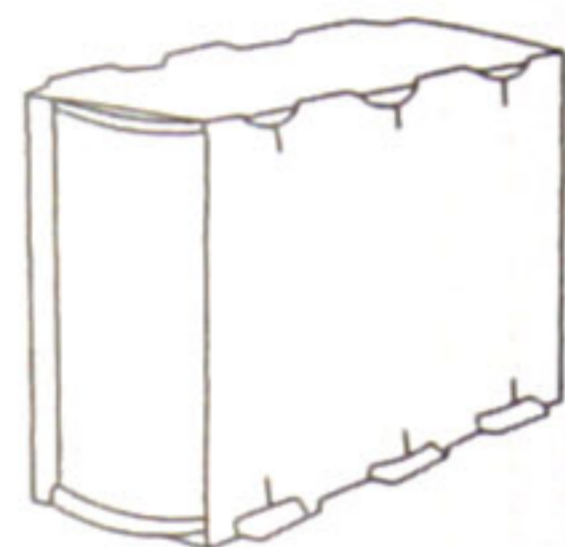
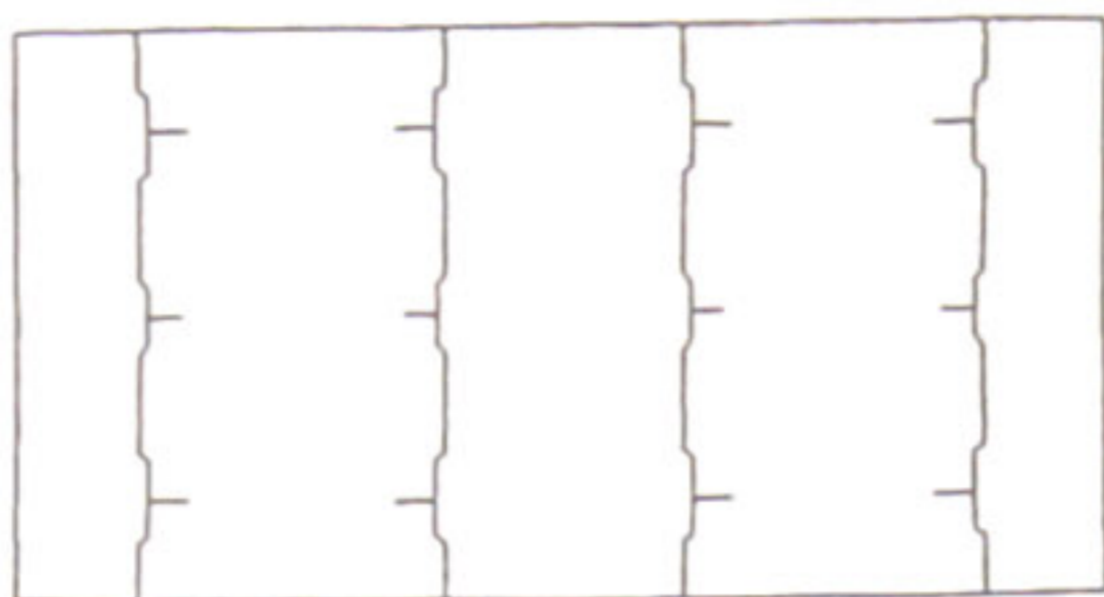
**Warning:** for patents and other protective rights see introduction page i 3, letter B.

For special designs from E see Group F50.

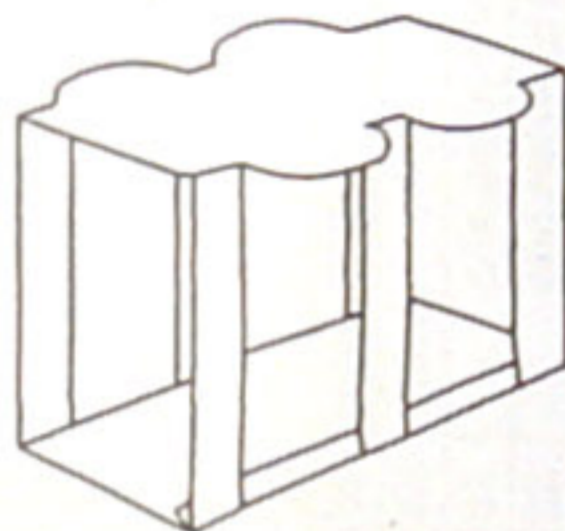
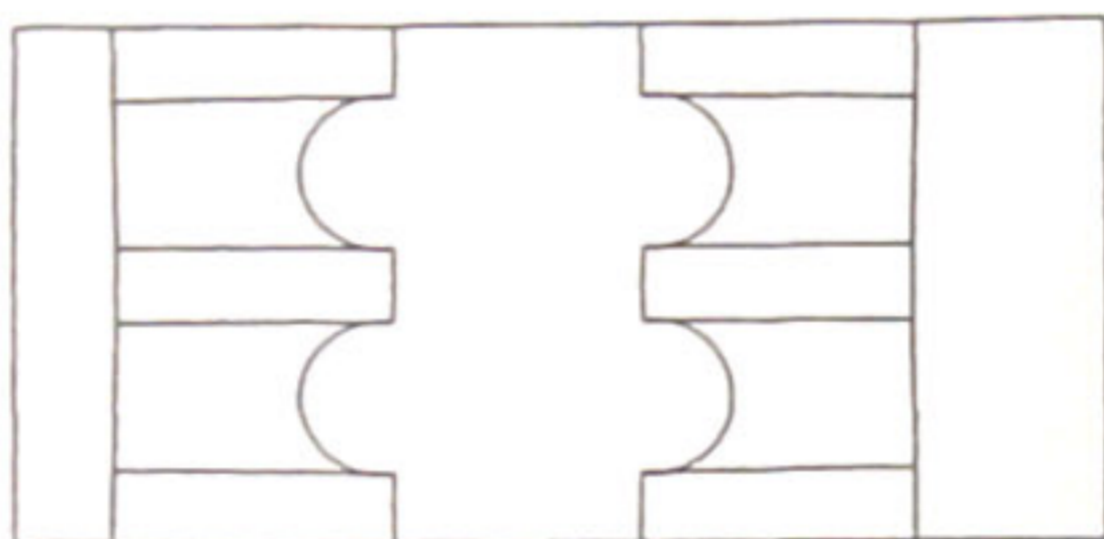
E 1011



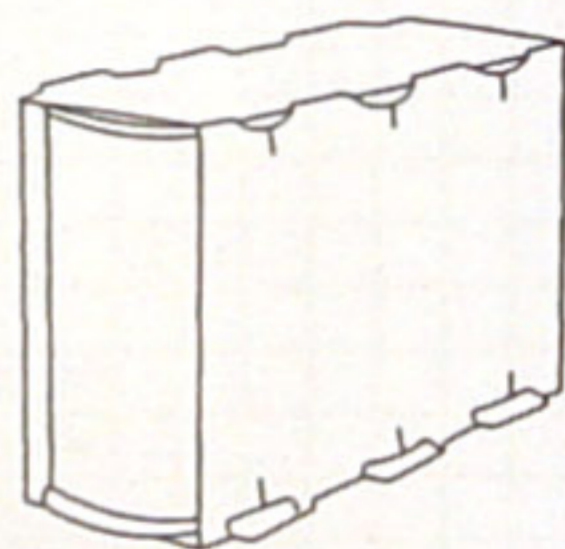
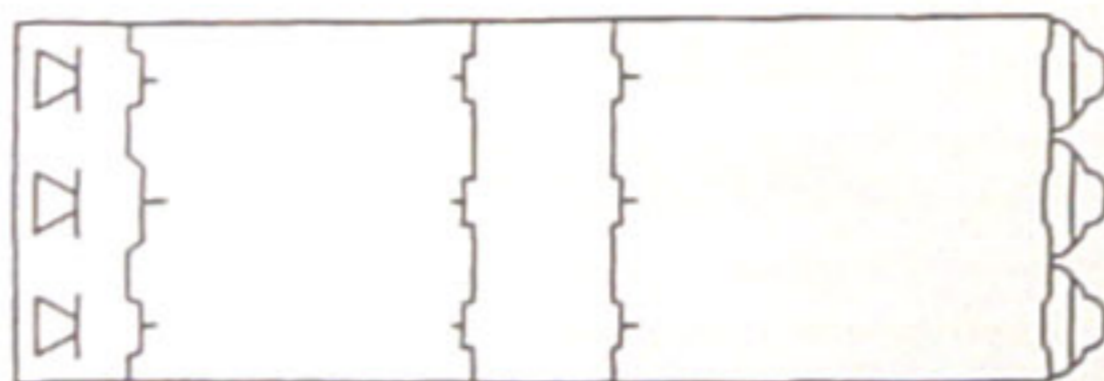
E 1020



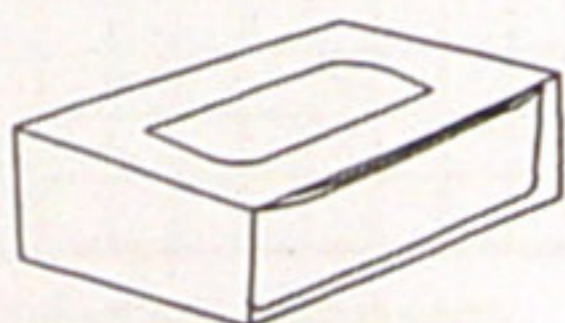
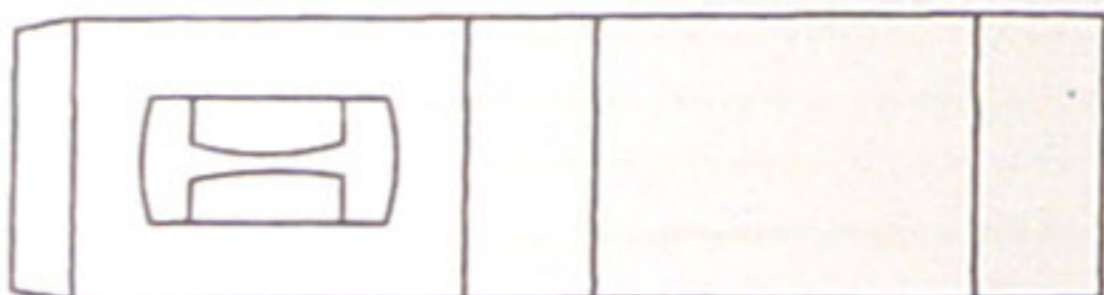
E 1021

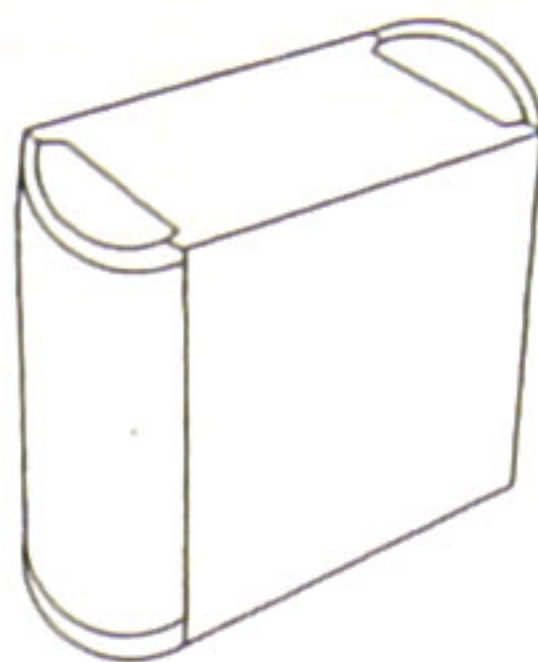
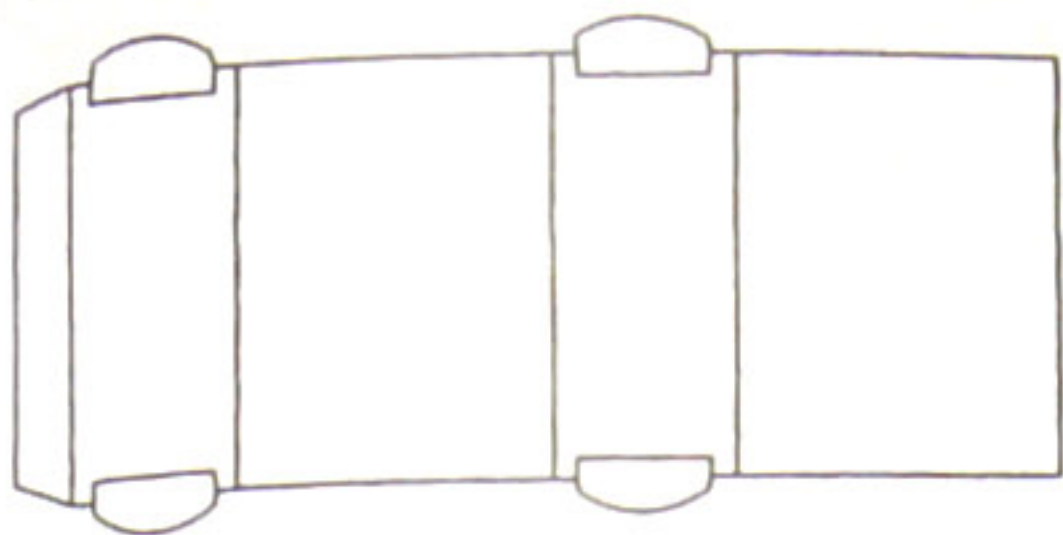


E 1030

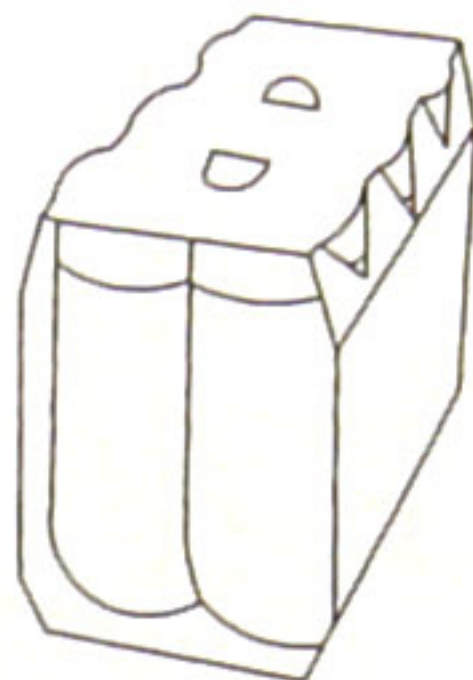
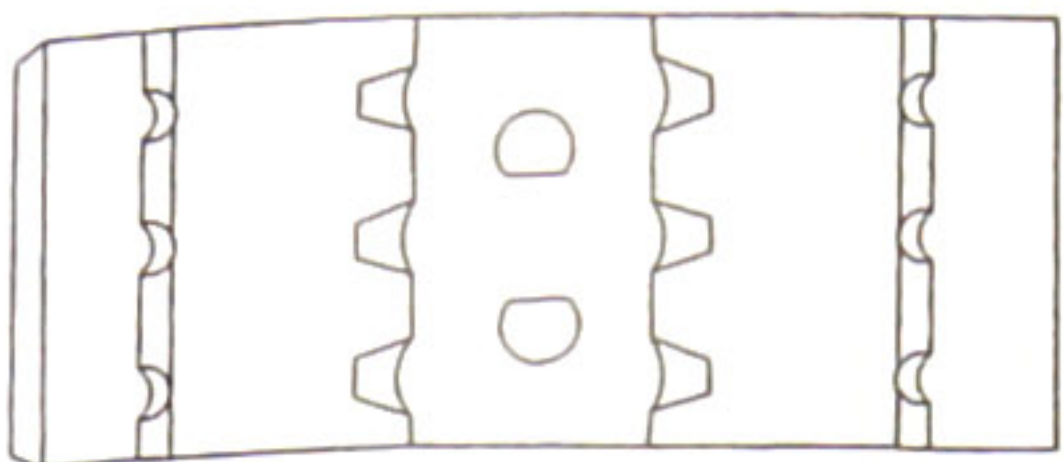


E 1120

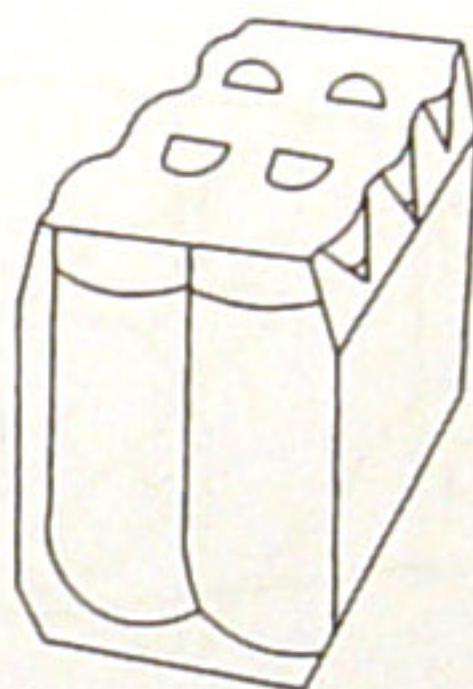
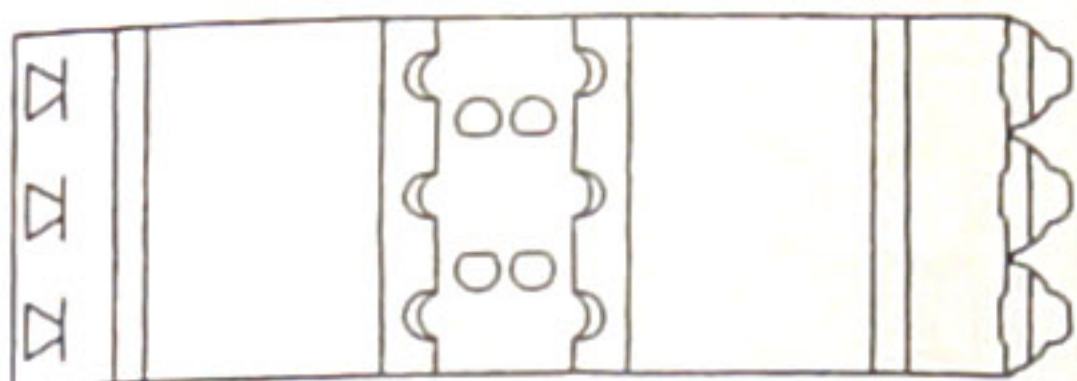




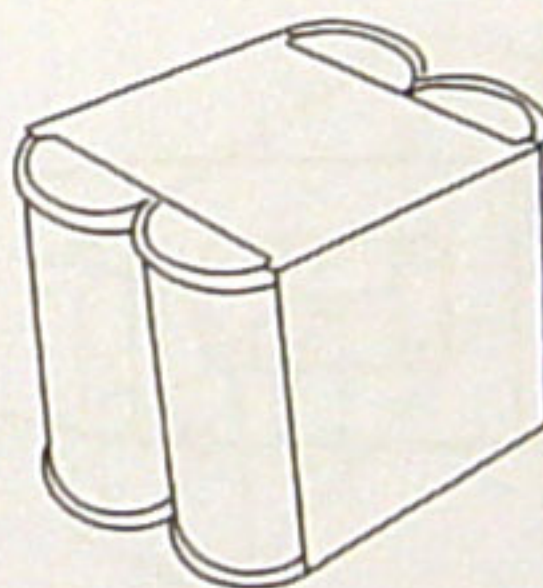
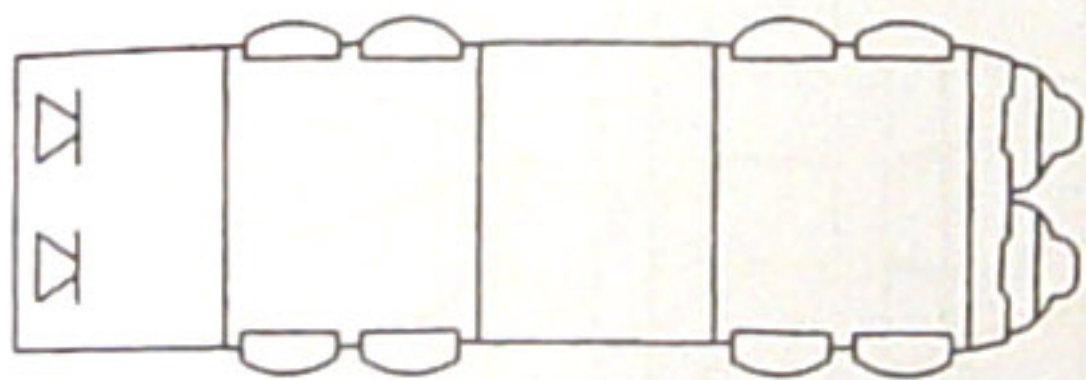
E 1140



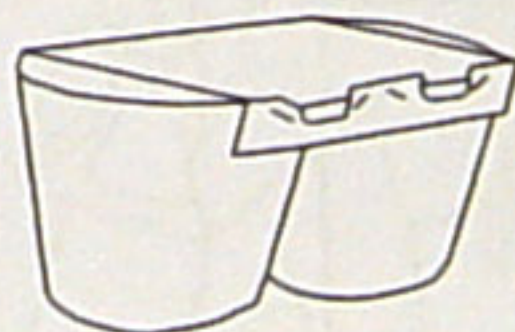
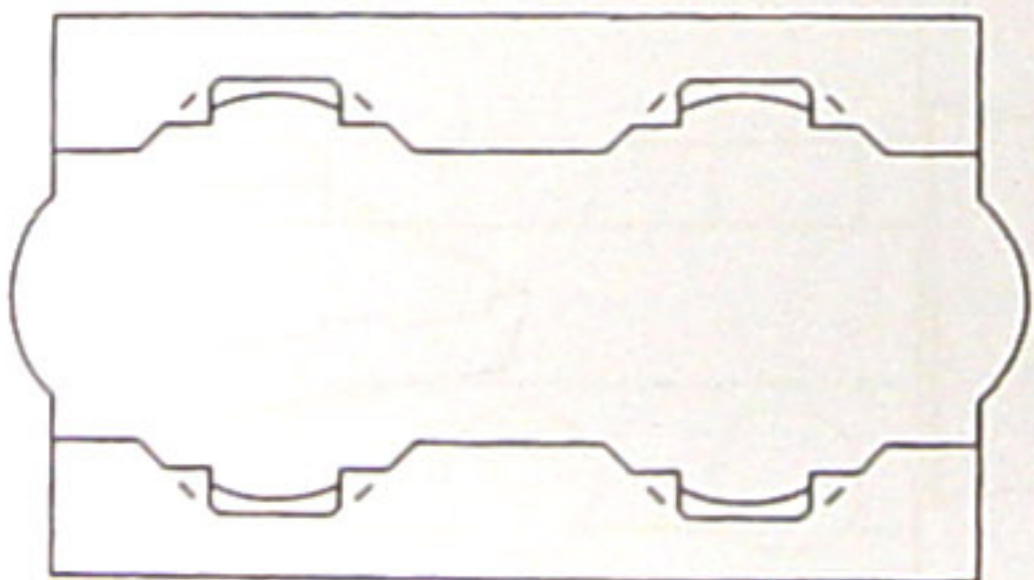
E 1220



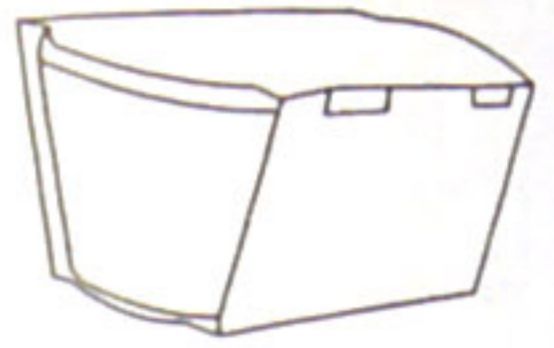
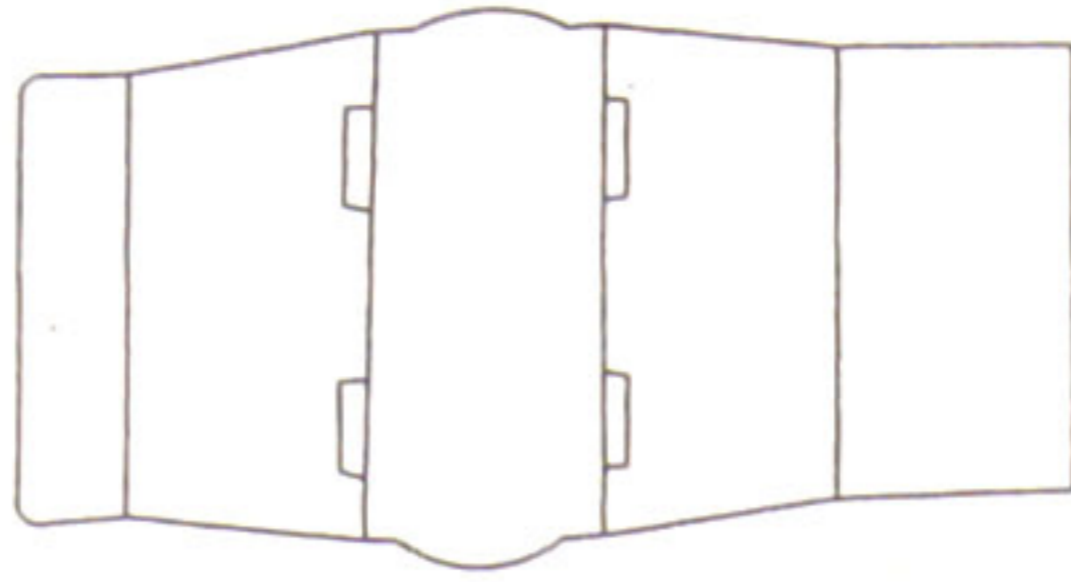
E 1330



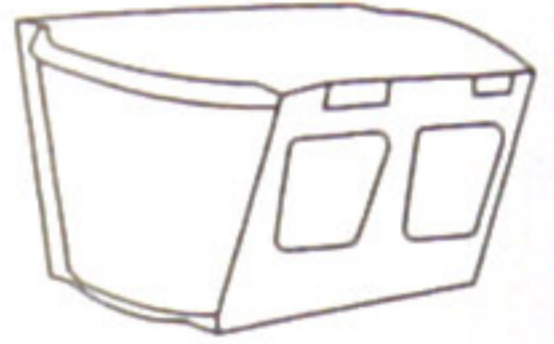
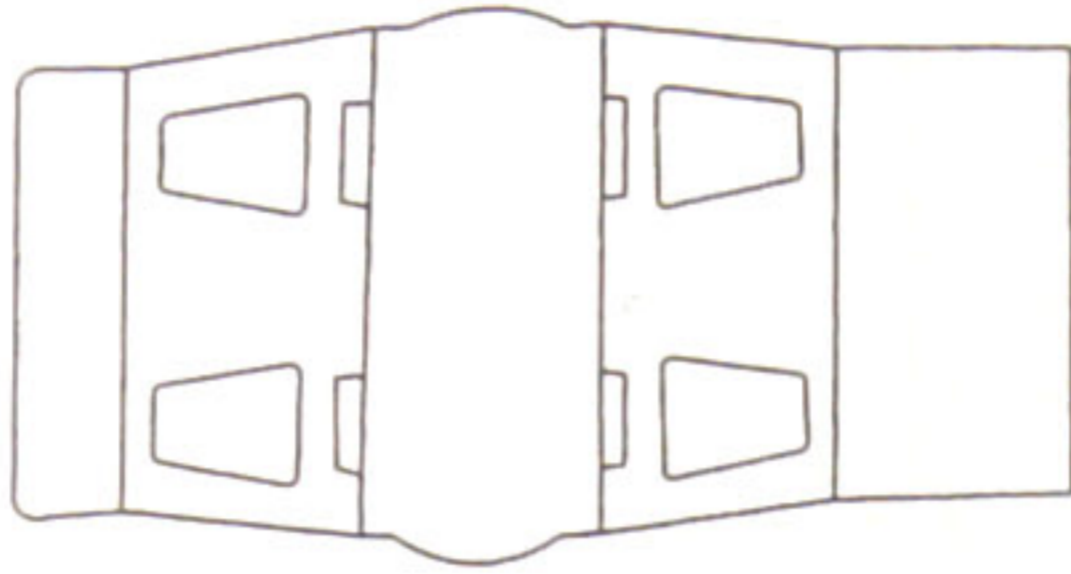
E 1341



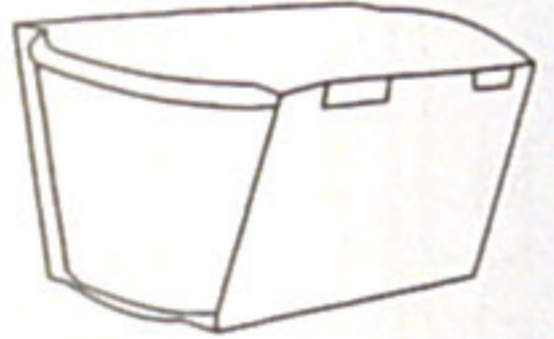
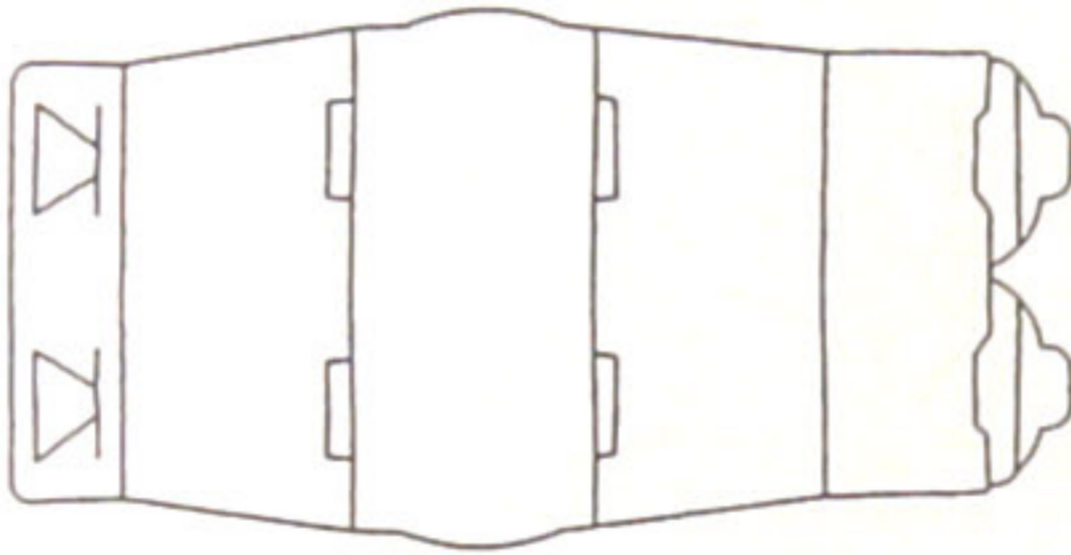
E 1411



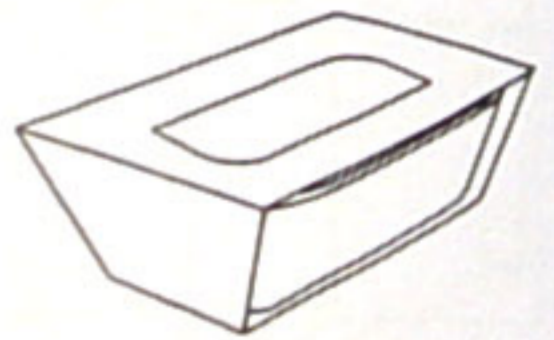
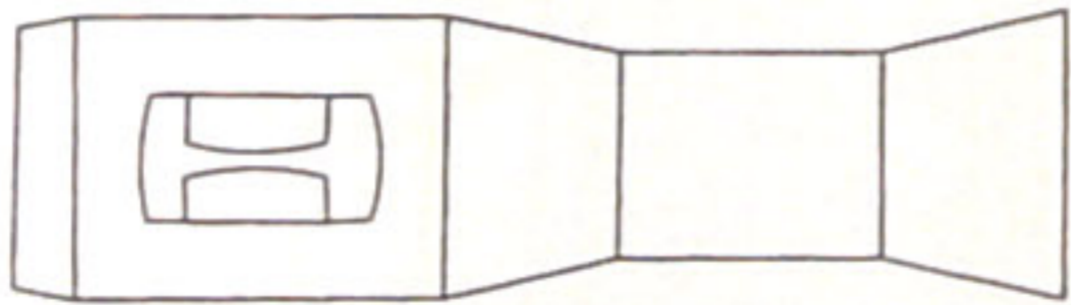
E 1420



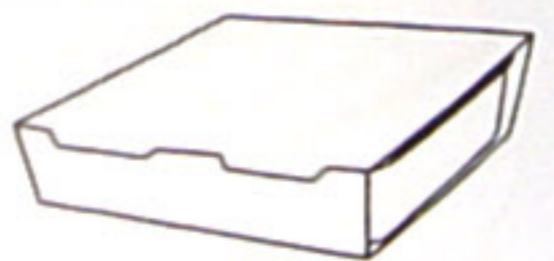
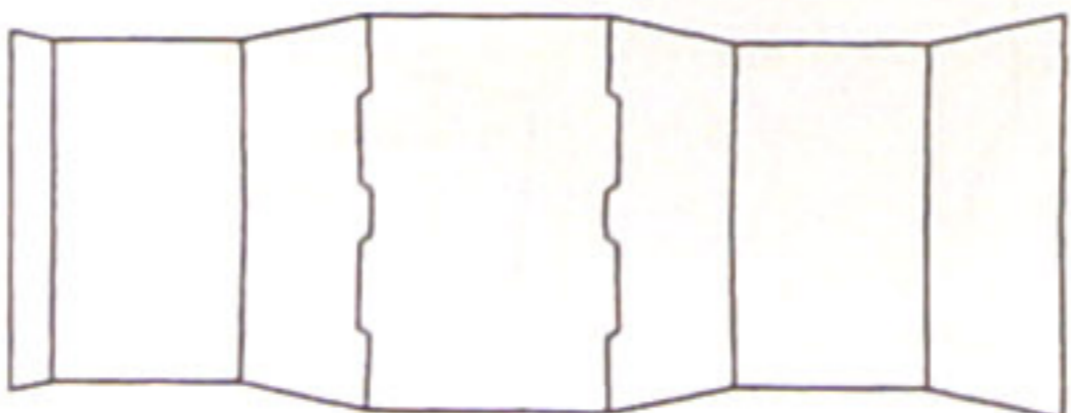
E 1421



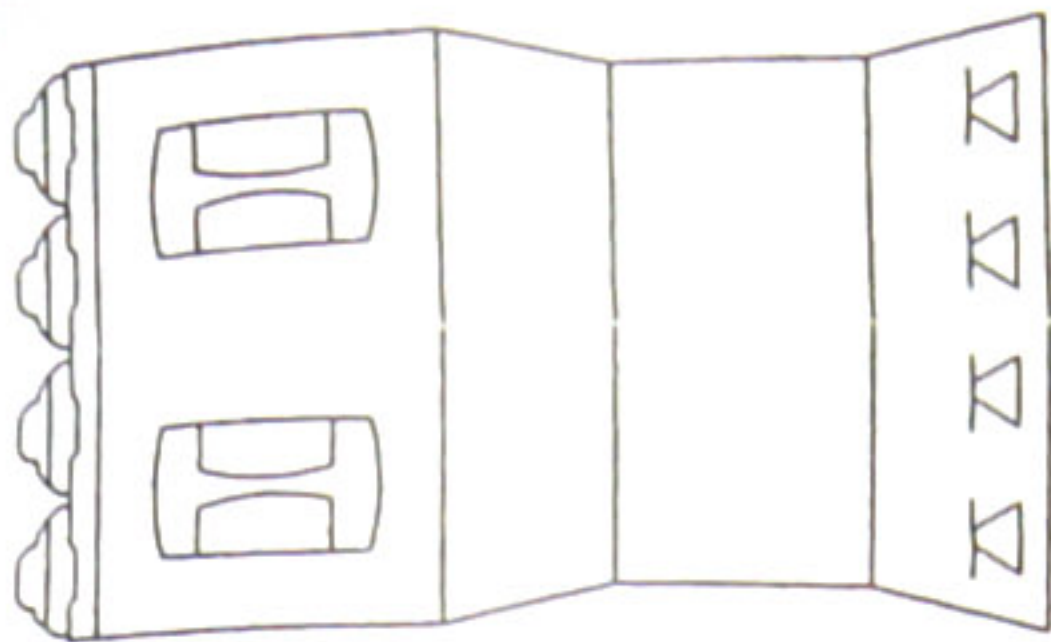
E 1430



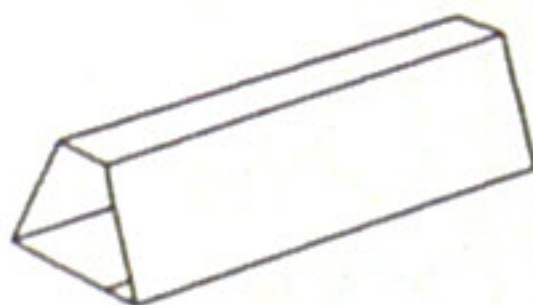
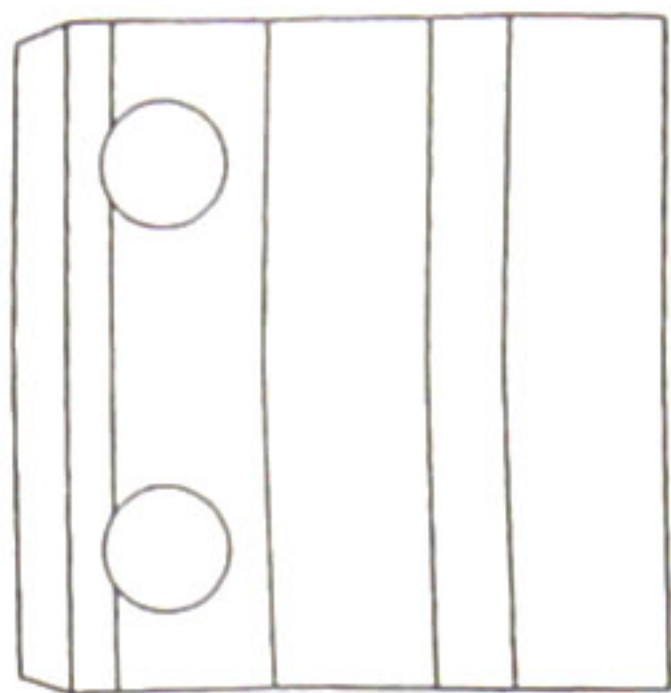
E 1540



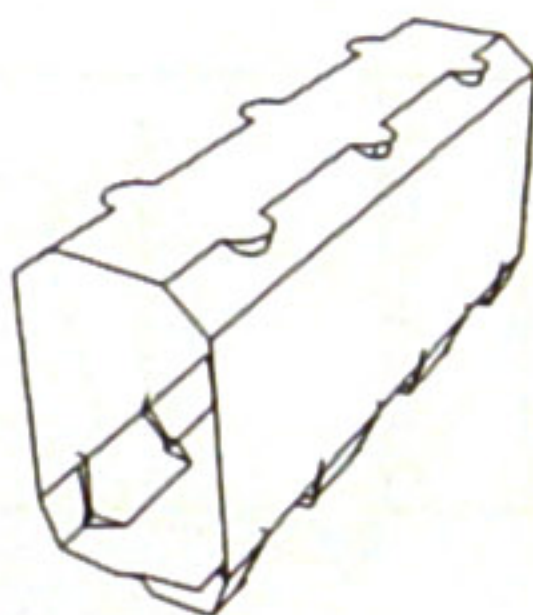
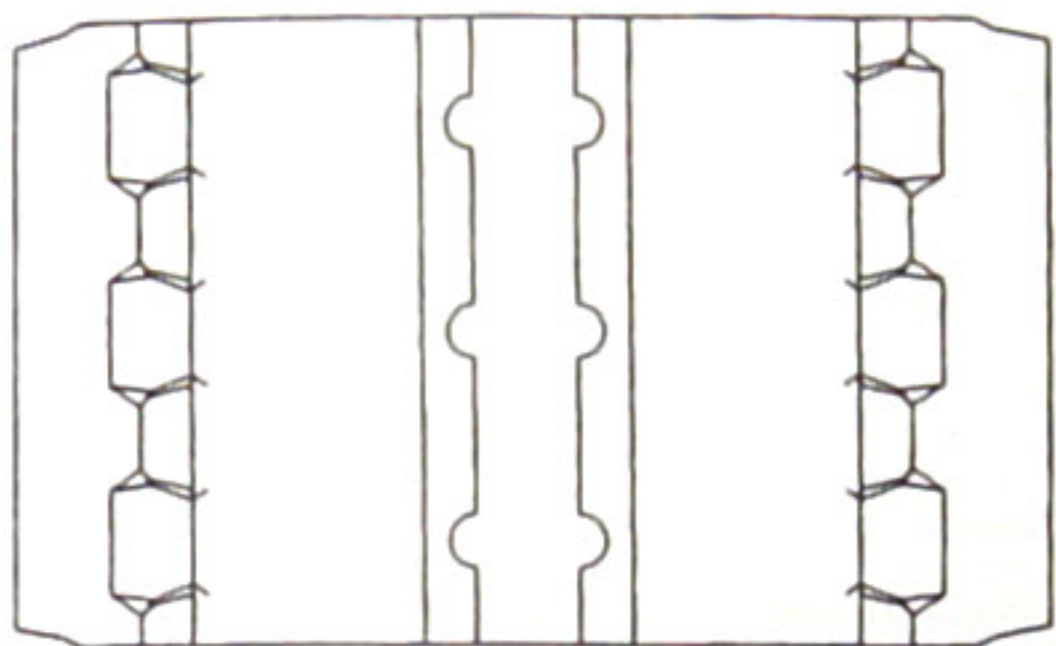
E 1620



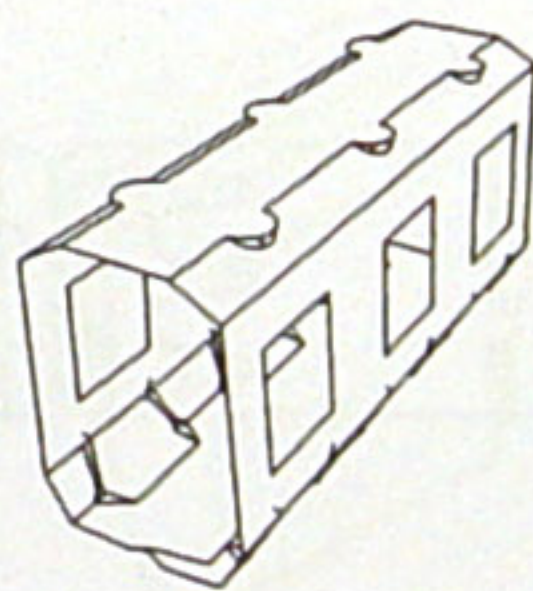
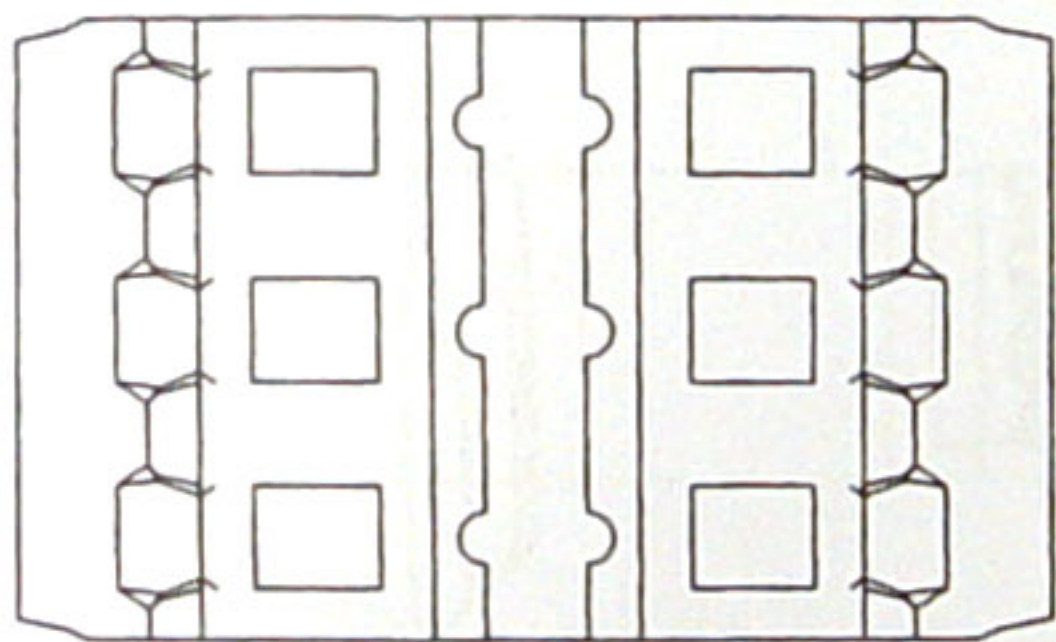
E 1741



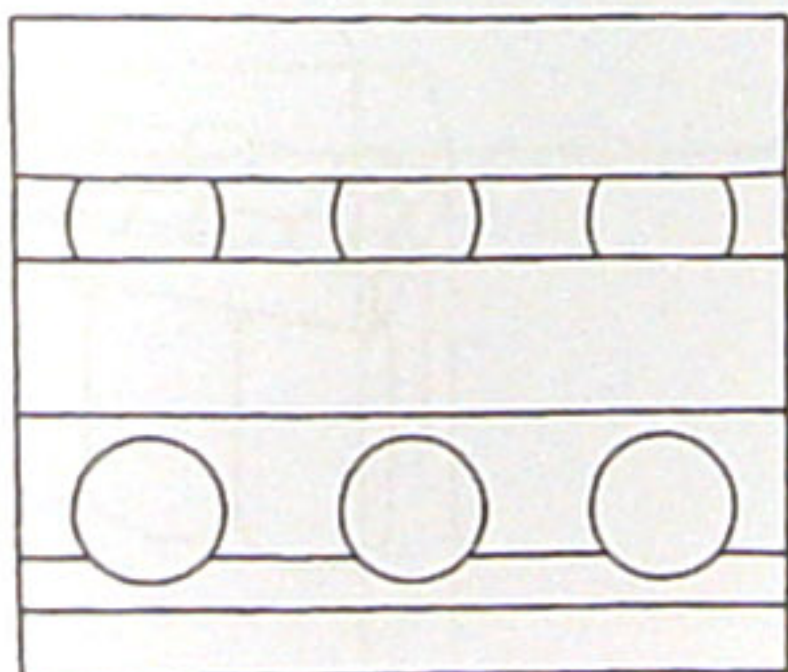
E 2010



E 2020

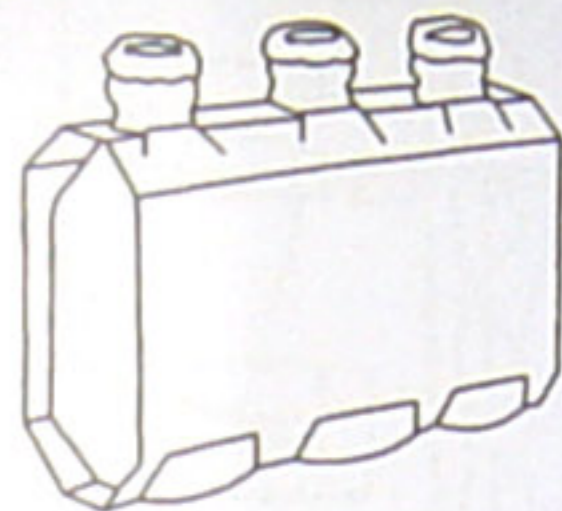
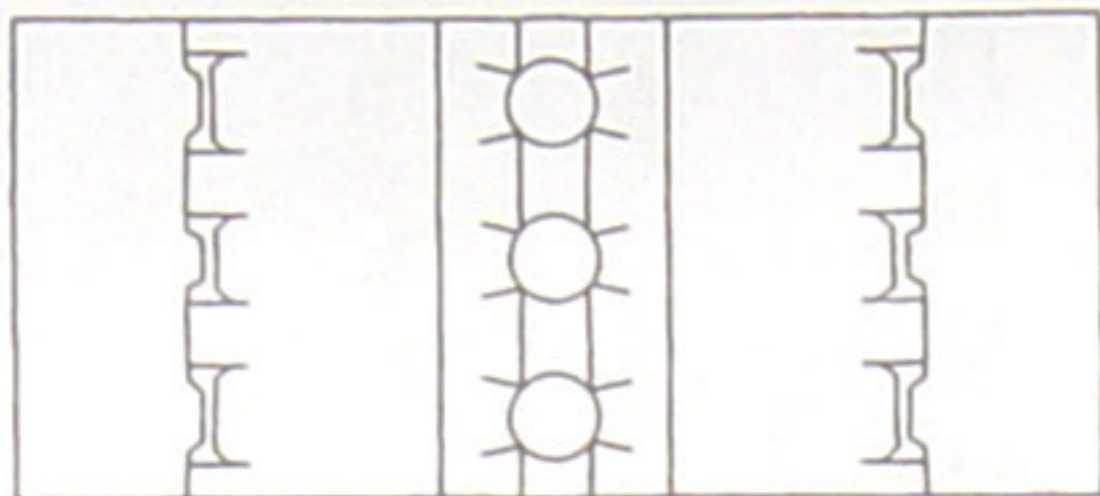


E 2021

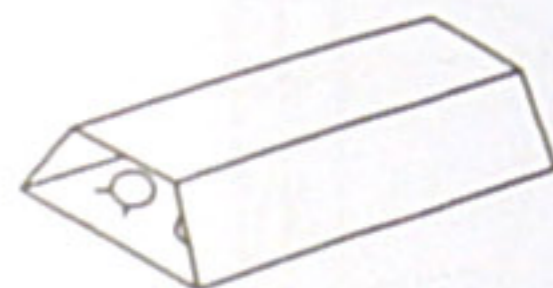
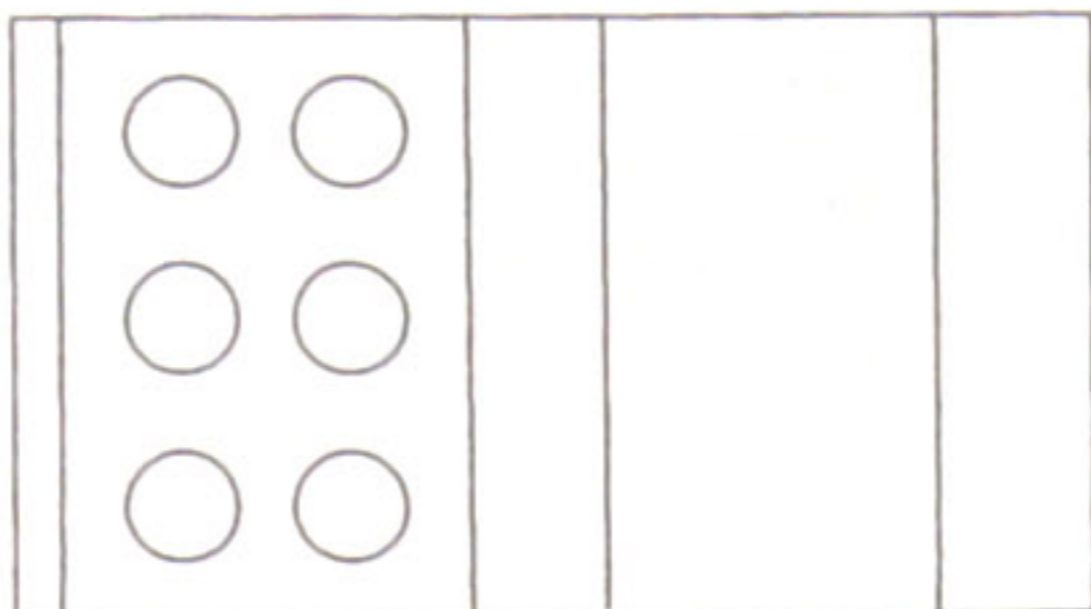


E 2110

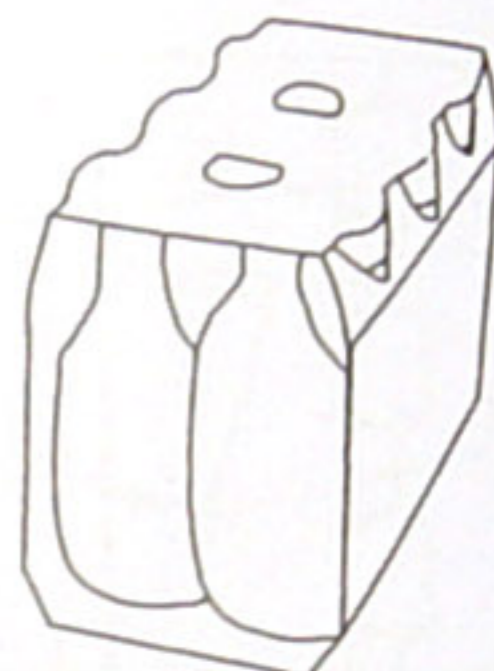
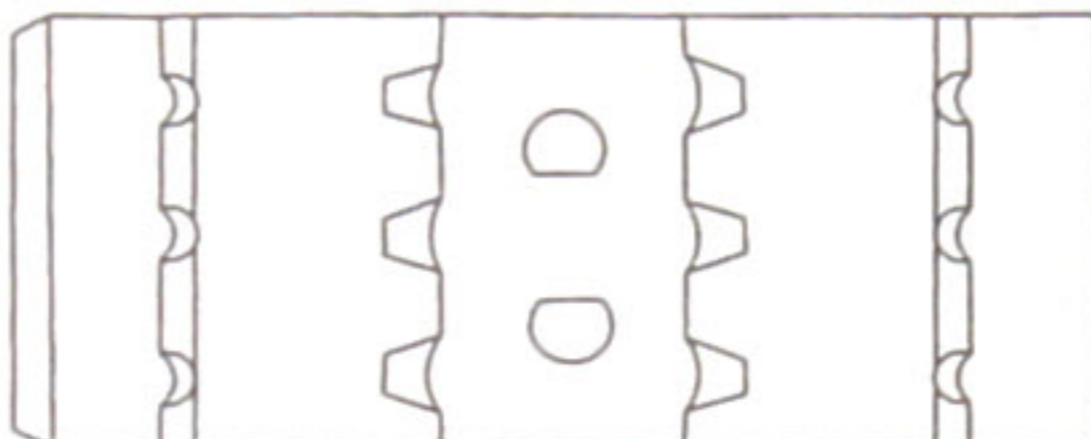
E 2120



E 2210



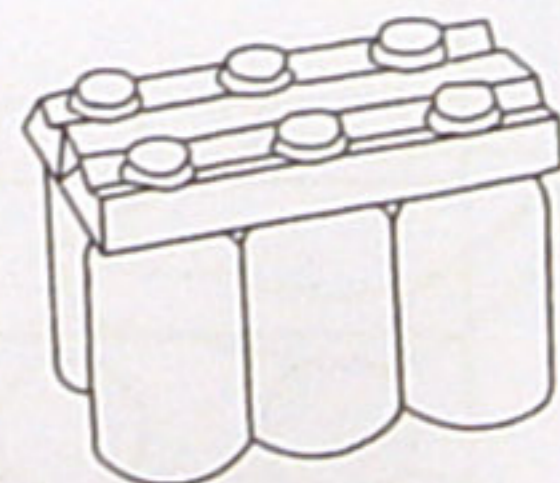
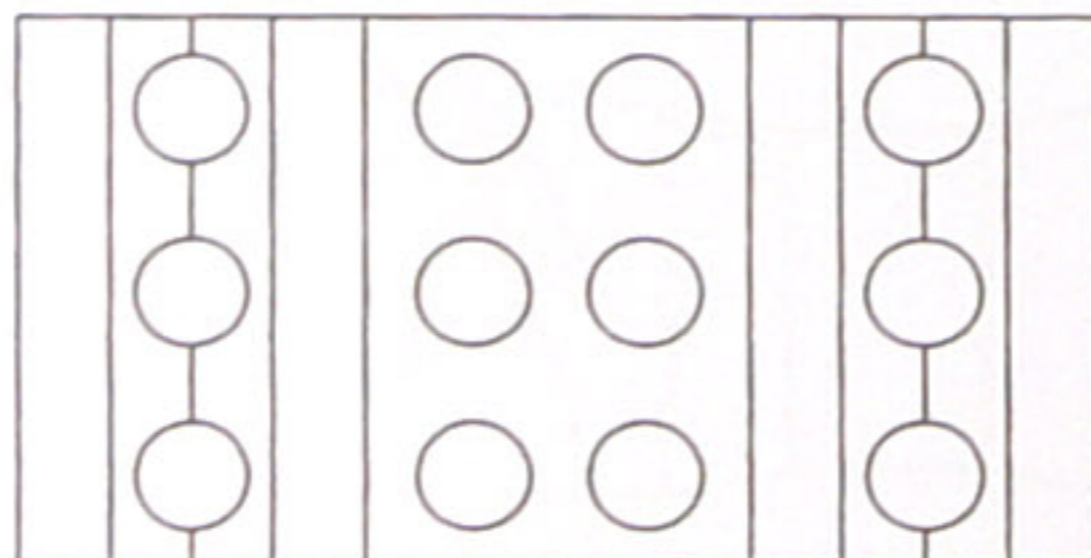
E 2220

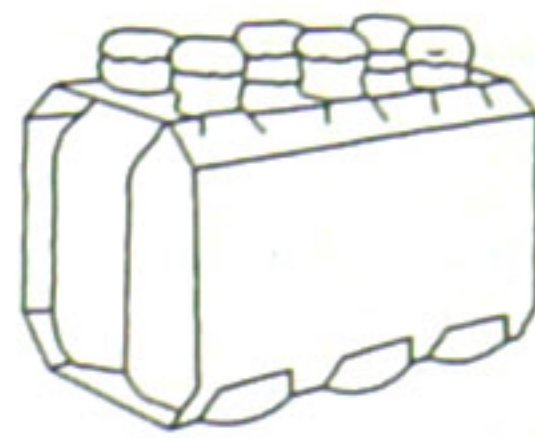
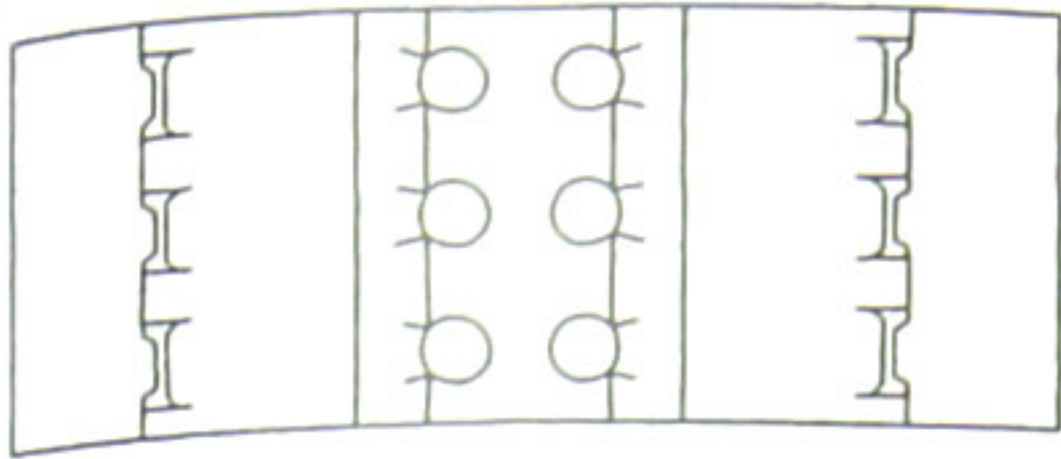


E 2222

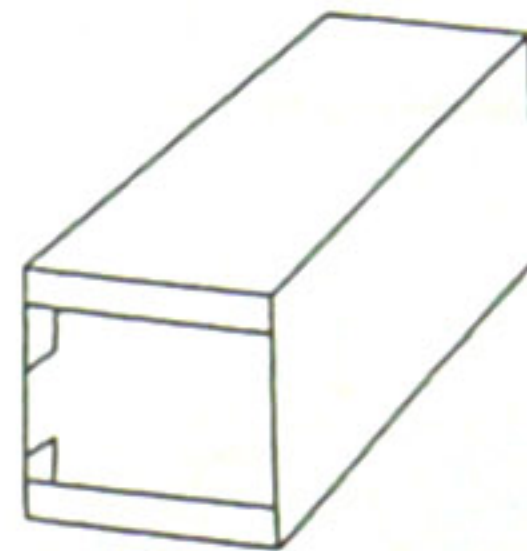
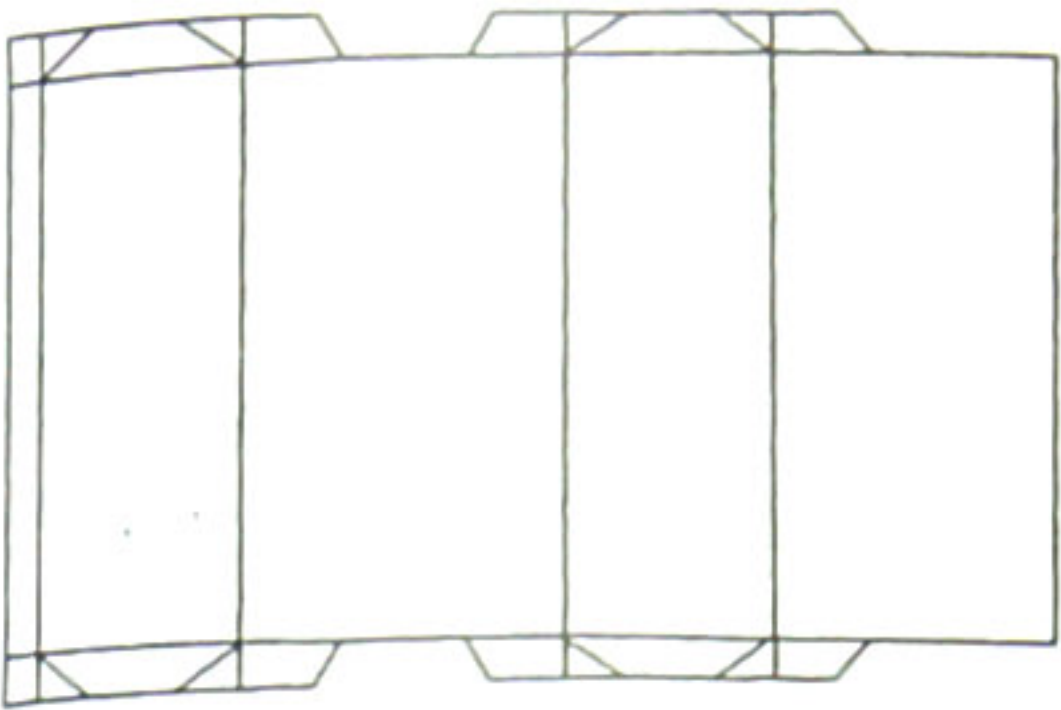


E 2310

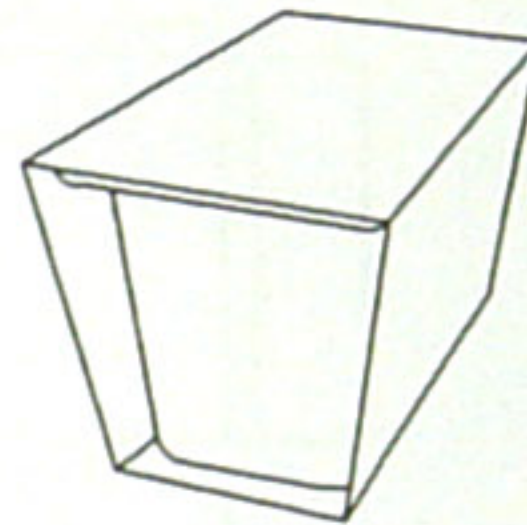
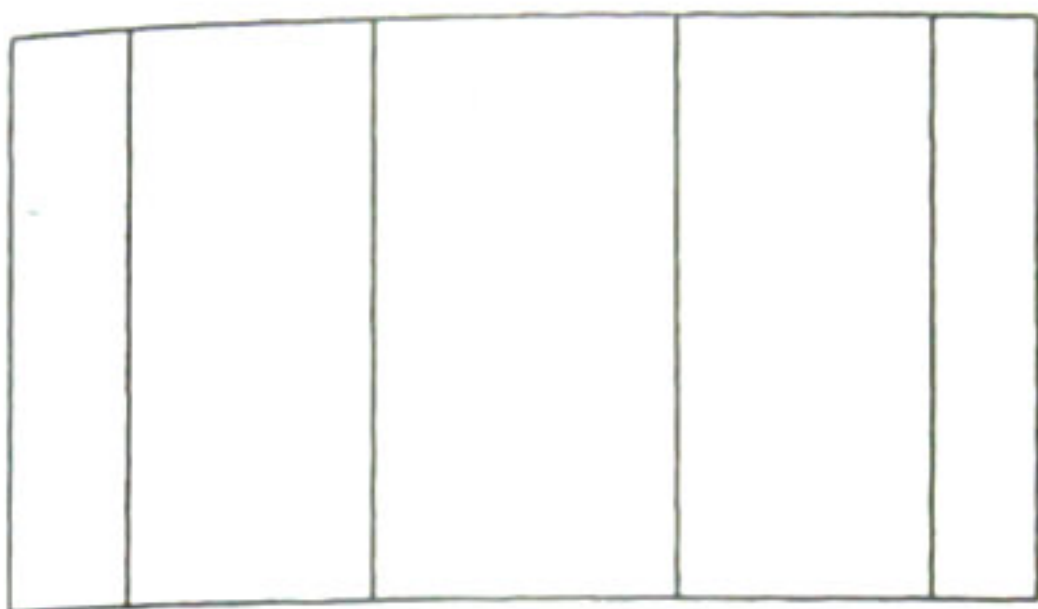




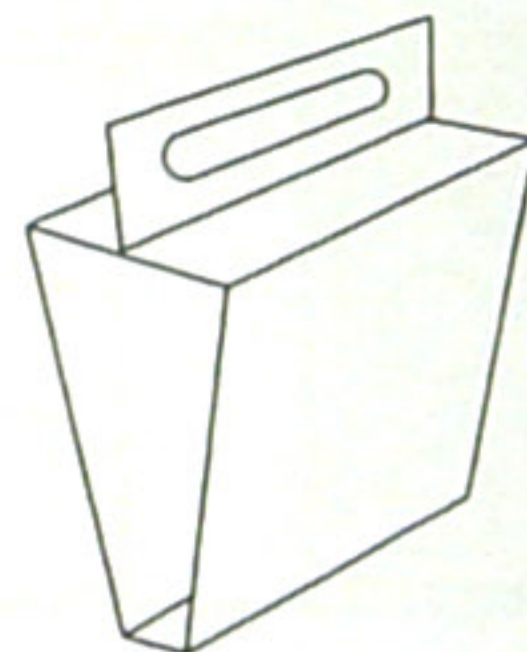
E 2320



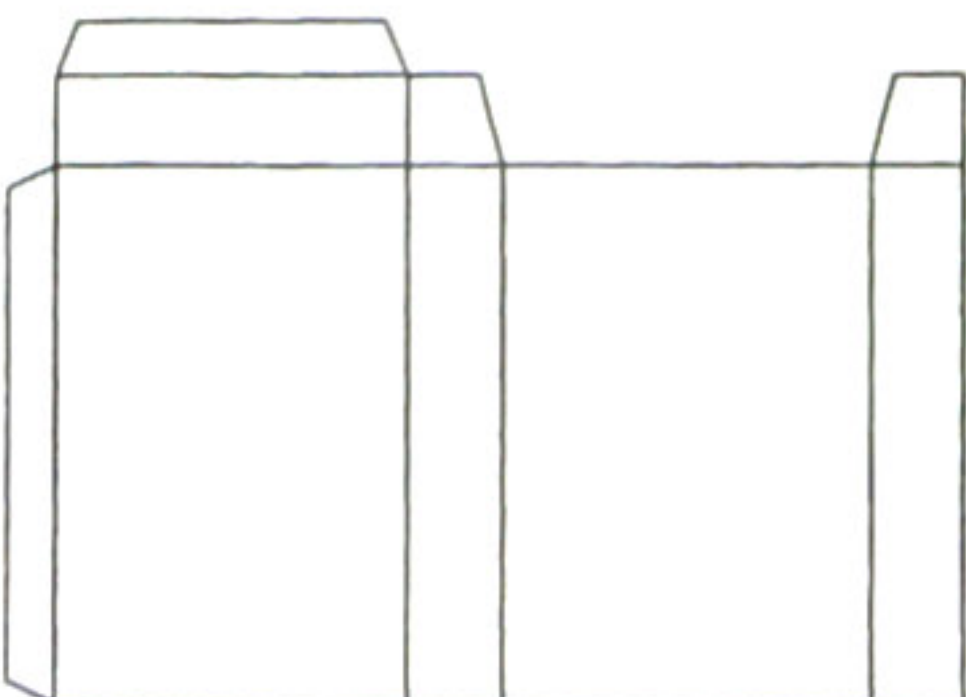
E 3020



E 3120



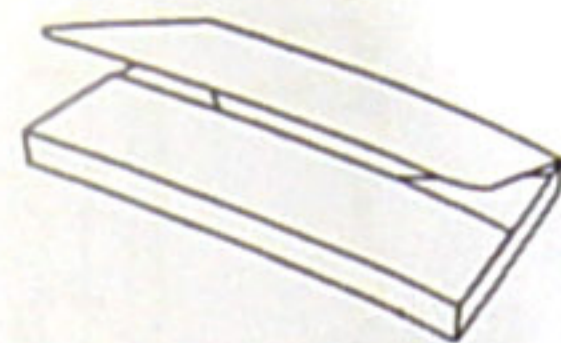
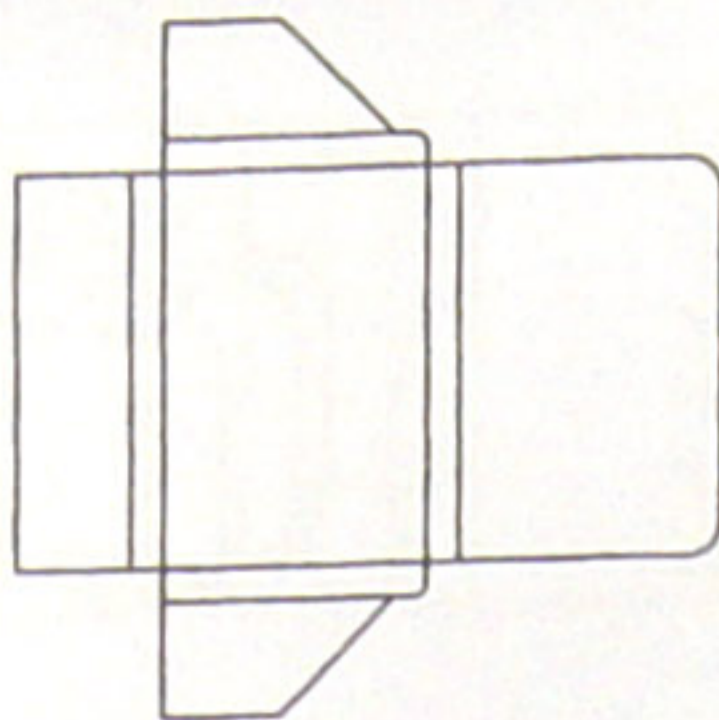
E 3122



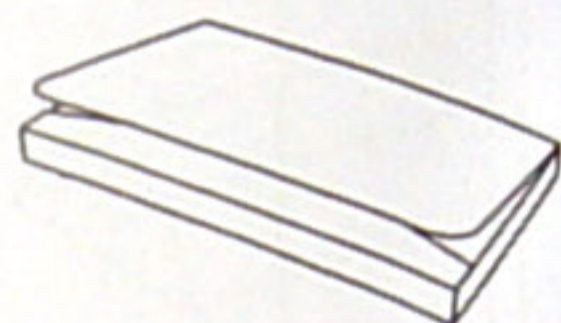
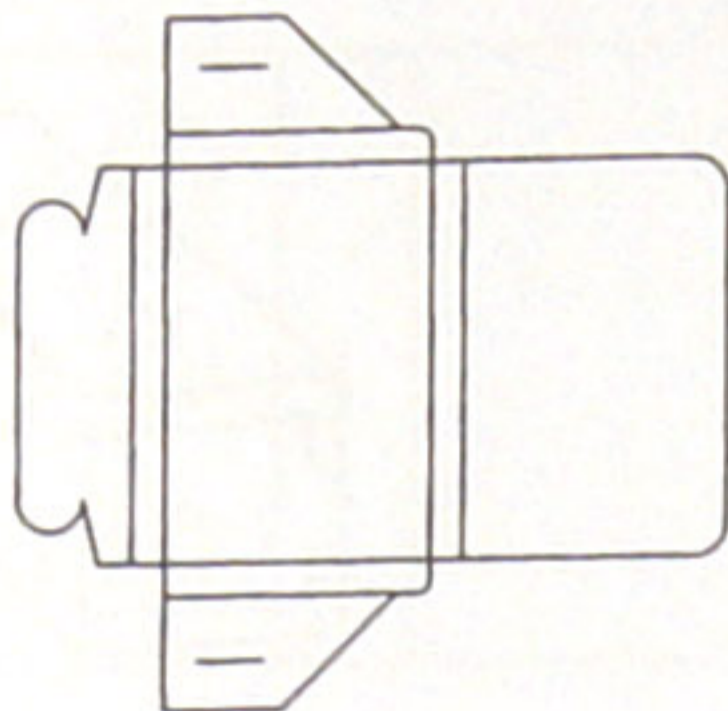
E 4050



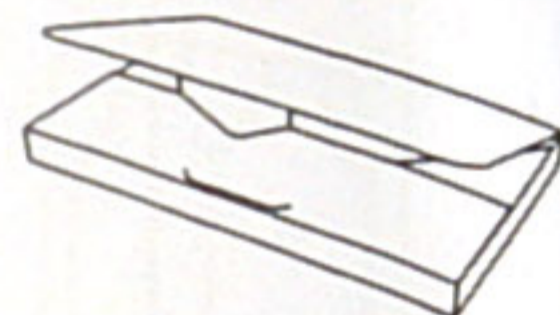
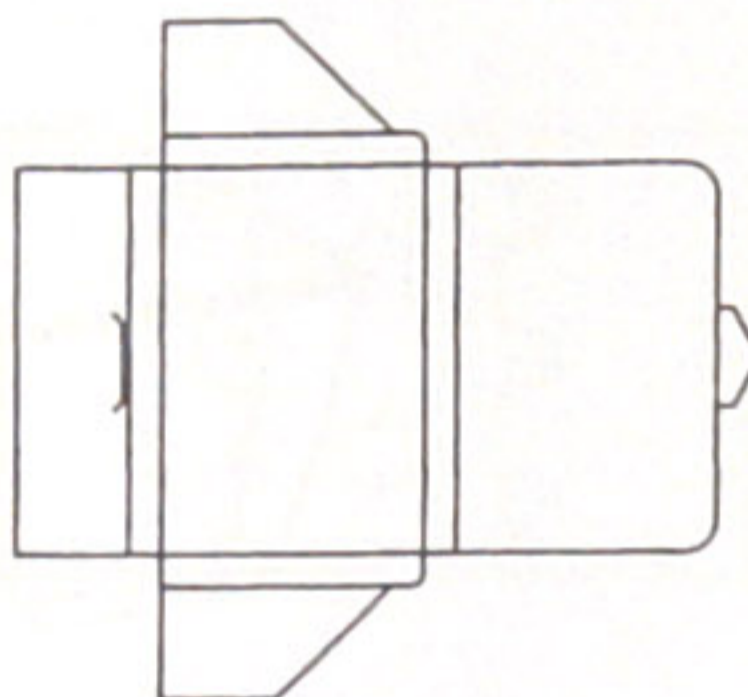
E 4080



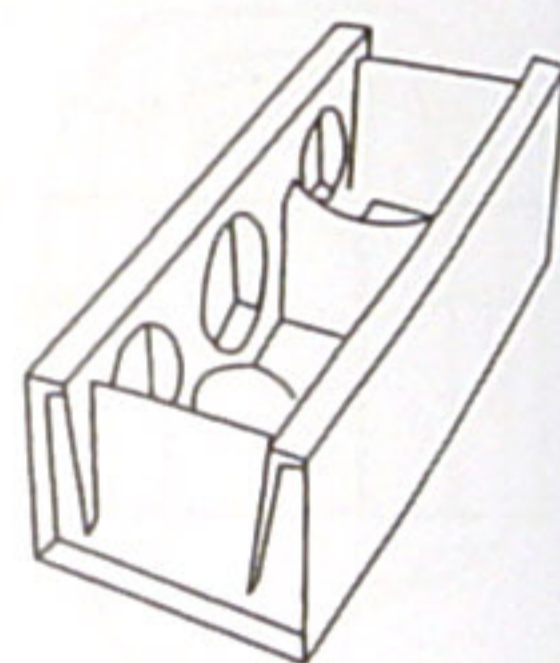
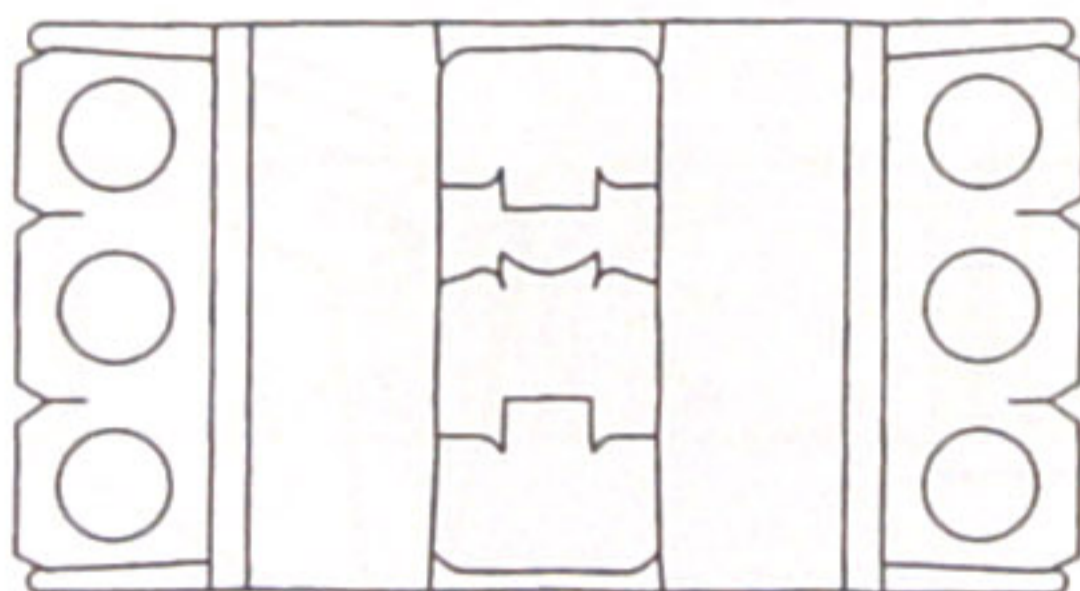
E 4081



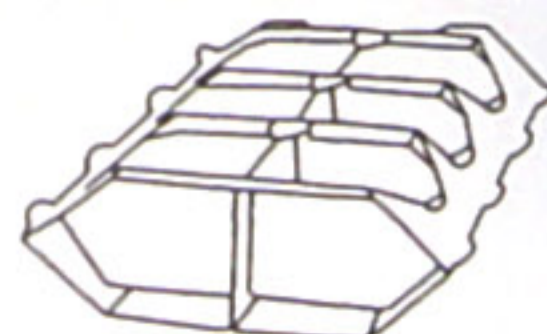
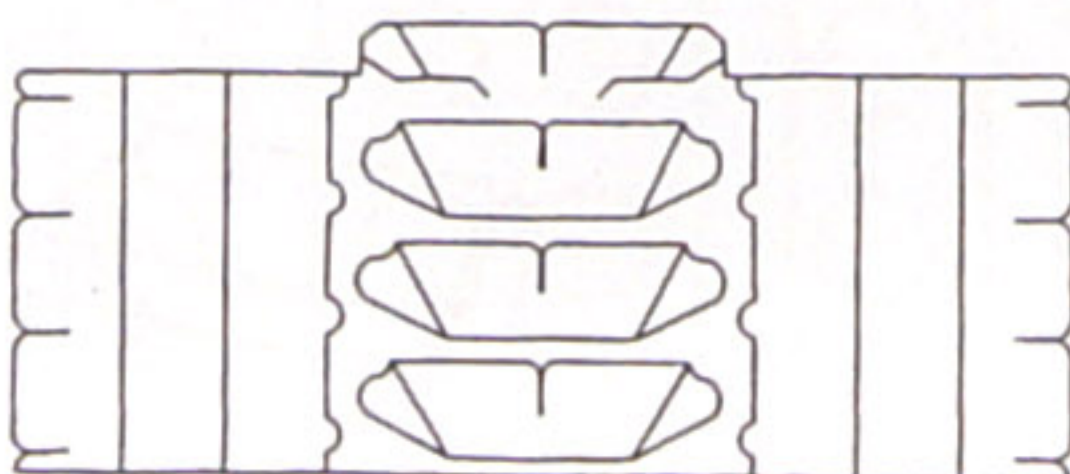
E 4082



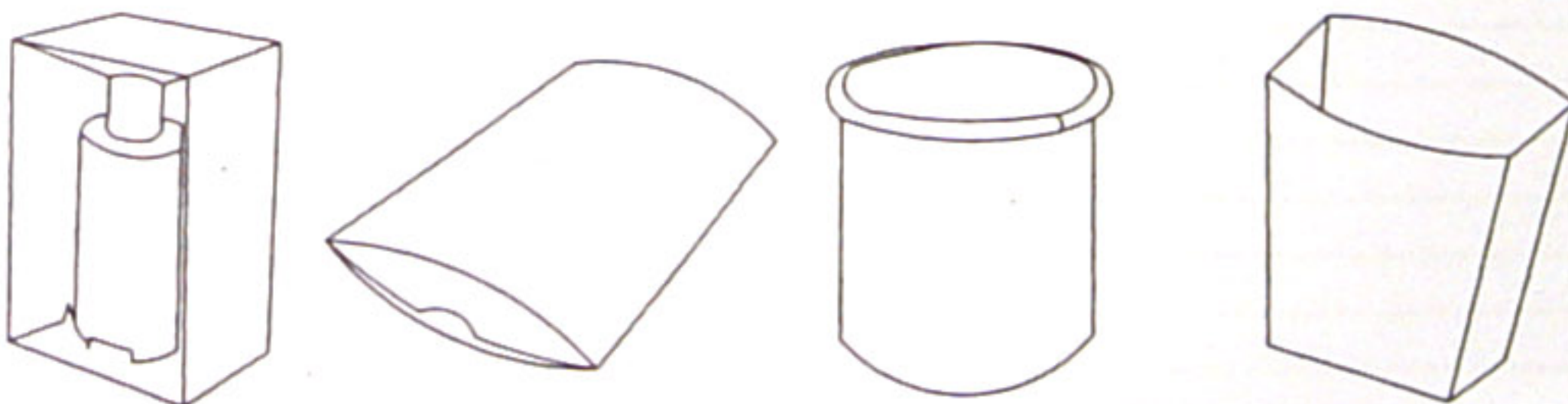
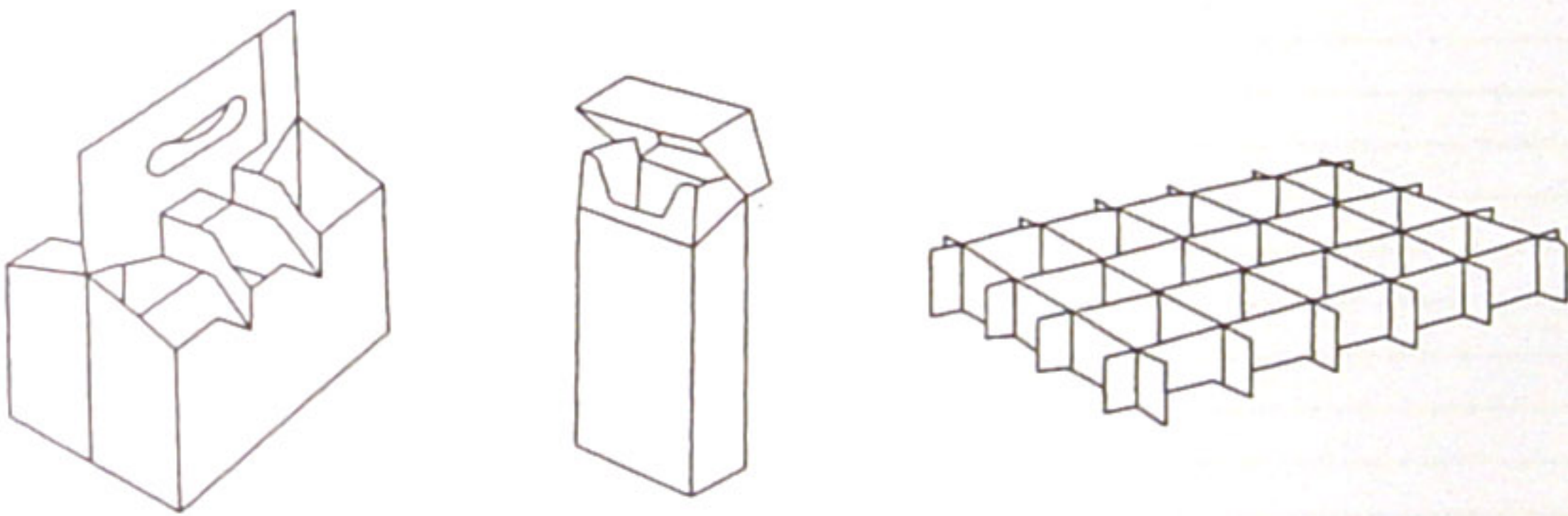
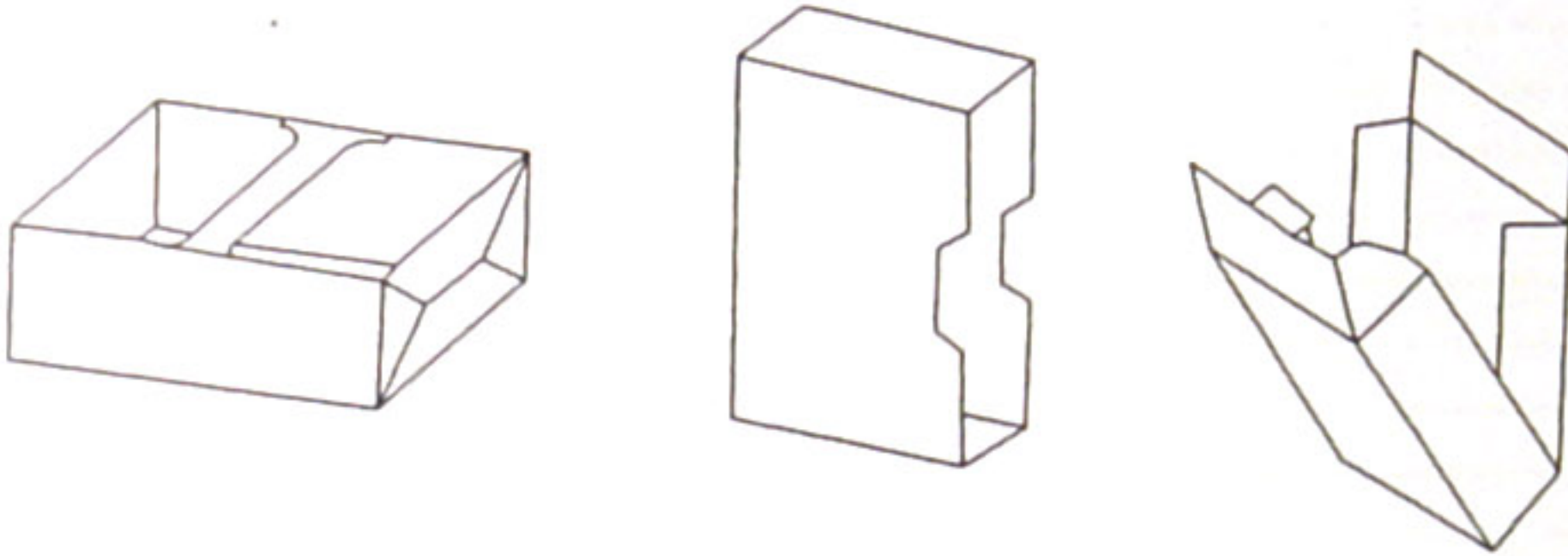
E 5055



E 5155



- F Other folding cartons
- F Sonstige Faltschachteln
- F Autres boîtes pliantes
- F Otras cajas plegables
- F Altri cartoncini / fustellati



**10 ex A: Rectangular folding cartons with glued long seam**

1000 and display panel between tucks (top/bottom)

1001 extended panel single gluing

1002 double gluing – folded down

1003 double gluing – folded together

1010 double compartment

1011 open – double sleeve

1012 one compartment closed

1013 both compartments closed

1020 with rosette closure

1021 on top (various bottoms)

1022 on top & base

1023 on top with fold in base

1030 with carrying handles – various base flaps possible

1031 formed of two main flaps

1032 recessed top

1033 formed of two side flaps, tuck-in

1034 formed of two flaps, tuck-in side flaps

1035 gabled top of two tuck-ins

1036 with separate handle with side wall

1037 with extended back panel's handle

1040 tray with folding bottom flaps on both sides

1041 vertical walls, one or more apertures

1042 vertical walls, two apertures/carrying handle

1045 sloping walls, one or more apertures

1046 sloping walls, two apertures/carrying handle

1050 with recessed top/base

1051 with flaps

1080 special design

1081 skillet base locking top with inner lining

1082 telescopic lid and base (closures: see Group A)

1083 with distorted side edges

**20 ex B: Rectangular folding cartons not glued on long seam**

2000 carton with 4 double walls

2001 with curved top panel

2002 and conical side panels

2003 with sides of unequal height

2004 2 piece flange box/lid

2010 tray with tuck in flaps

2011 and tuck in top as display

**Warning:** for patents and other protective rights see introduction page i 3, letter B.

2020	tray with hooks
2021	single walled sides, extended ends with dust flaps
2030	tray with 4-point gluing
2031	tuck in flap as display
2032	tuck out glued lid
2033	tuck in flap with integral inset
2034	tuck in end with tear-off strips
2035	rounded ends and curved top, 2-piece
2040	tuck in flap box with continuous base & lid attached
2041	hinge back lid with glued corners
2042	with folded corners
2043	inside lid display
2050	rolling folding carton (tube from Group A)
2051	without corner covers, 2 dust flaps
2052	2 hollow walls
2053	2 platforms
<b>30</b>	<b>ex C: Non-rectangular folding cartons with glued long seam</b>
3000	triangular
3001	side walls rectangular without flaps (tube)
3010	quadrangular
3011	side walls trapezium shaped with sealing flap underneath (beakers)
3020	hexagonal
3021	side walls rectangular, flaps tucked in
3022	flaps folded, glued with tamper evident strip
3050	polygonal with hollow top/bottom
3051	hexagonal with hollow top as flap
3052	glued base
<b>40</b>	<b>ex D: Non-rectangular folding cartons without long seam gluing, folded</b>
4010	polygonal
4011	corners bevelled (sketch 4 corners)
4012	corners bevelled (sketch 8 corners)
4060	beakers
4061	sidewalls trapezium shaped, glued (sketch 8 corners)
<b>50</b>	<b>ex E: Product integrated folding cartons</b>
5000	sleeves & open packaging for product display
5001	all sides tucked in (bottle)
5002	rounded sidewalls, glued (bottle)
5003	with base for locking together, glued (bottle)
5004	with push in's for interlocking products, glued (tube)

5010 Carrying carton  
5011 with 2 round compartments glued to the base (cylindrical products)

5020 block products  
5021 end-mounted

**60 Other folding cartons with flat surfaces**

6000 with continuous base or lid, double B-sides in cut design  
6001 glued on 2 sides, tuck in flap

6002 end flap  
6003 with bevelled side walls

6004 tuck in flaps & lock  
6005 webbed flap

6006 locked in on 2 sides, tuck in flap  
6007 end flap

6010 flip-top flap

6011 glued on two sides, continuous base in one part without shoulder  
6012 in two parts with shoulder  
6013 with a long shoulder

6014 glued on one side, end flap beneath and  
end flap on top, integrated shoulder on base  
6015 on side

6016 hinged lid, without end flap

6020 bending via perforation

6021 continuous base & lid, double B-sides

6030 carry pack with separators & handle (open)

6031 4 compartments

6032 6 compartments

6040 folding carton with separator

6041 one row

6042 two row

6080 remaining folding cartons with straight surfaces

6081 octagonal folding carton with glued folding base & attached lid  
(square lid & square base pushed against each other)

6082 12-cornered folding carton with glued edges & attached lid  
(6-cornered base & 6-cornered lid slotted into each other)

**70 Other folding cartons with surfaces which are not flat (variable volumes)**

7000 pillow pack (folding carton with curved panels)

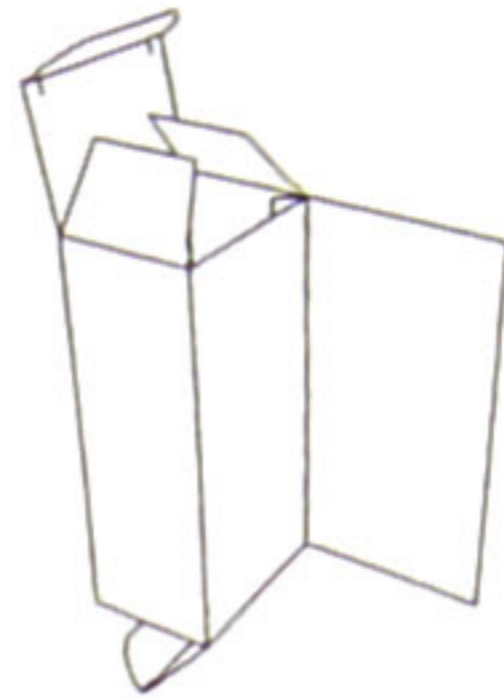
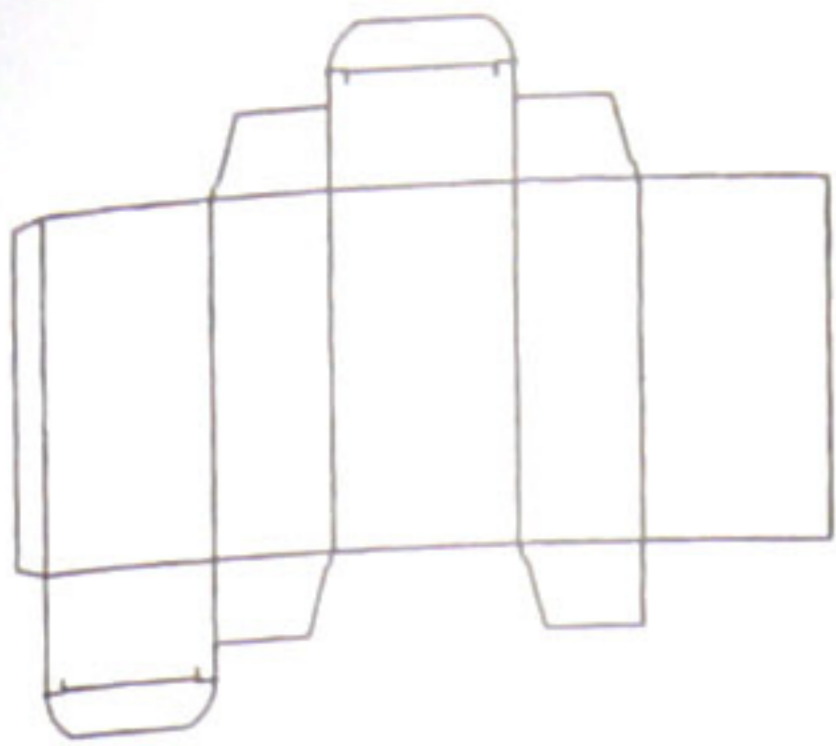
7001 end flap completely covered

7002 with dust flap & tamper evident strip

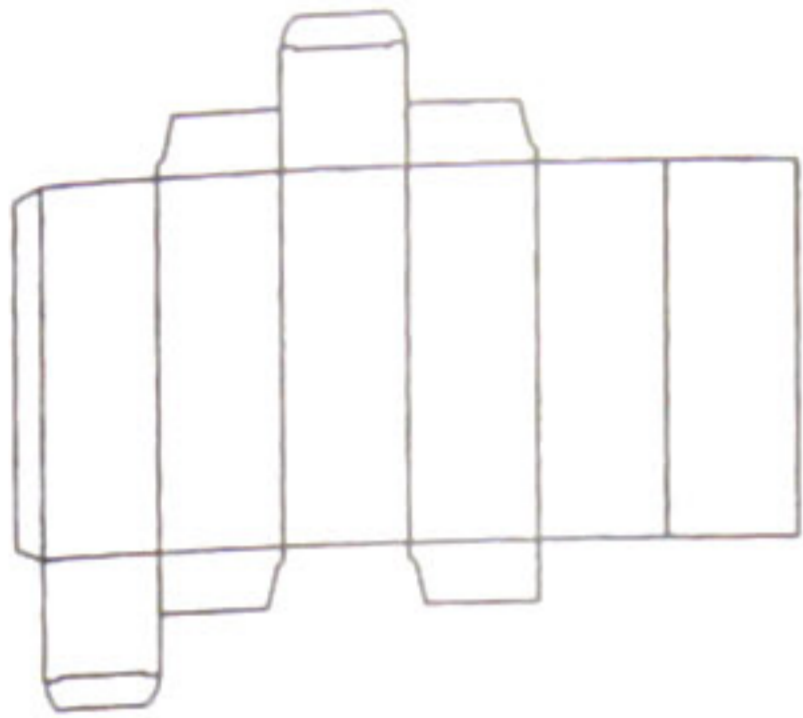
**Warning:** for patents and other protective rights see introduction page i 3, letter B.

7010	wallet
7011	without end flap (open)
7012	with end flap (closed)
7015	secured
7050	container (with/without lid)
7051	as flat bag
7052	as bag with folded base
7053	with fold at the sides
7054	with folds at side & base
7060	round cup (open)
7061	cylindrical in 2 parts
7062	conical in 2 parts
<b>80</b>	<b>Folding carton packing hints</b>
8000	compartment blanked – delivered separately
8001	lay flat
8002	with 2 side edges
8003	with 4 side edges
8010	separators attached to a folding carton for product positioning – integral part
8011	cut out platform inset for 5 bottles positioning – integral part
8012	cut out platform inset for 3 bottles positioning – integral part
8013	for spec. product (various large products) positioning – integral part
8020	compartments inserted in folding cartons (Group A or F10)
8021	as double compartment
8022	as triple compartment
8023	as diagonal double compartment
8024	as uneven compartments
8030	inserts/separators
8031	inserted cross partitions
8040	back supported
8041	aid to support
8050	blister card blanked
8051	simple card
8052	double card (1 crease)
8053	triple card (2 creases)

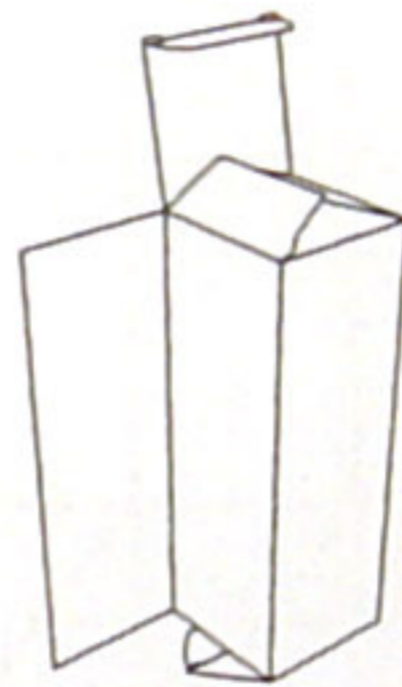
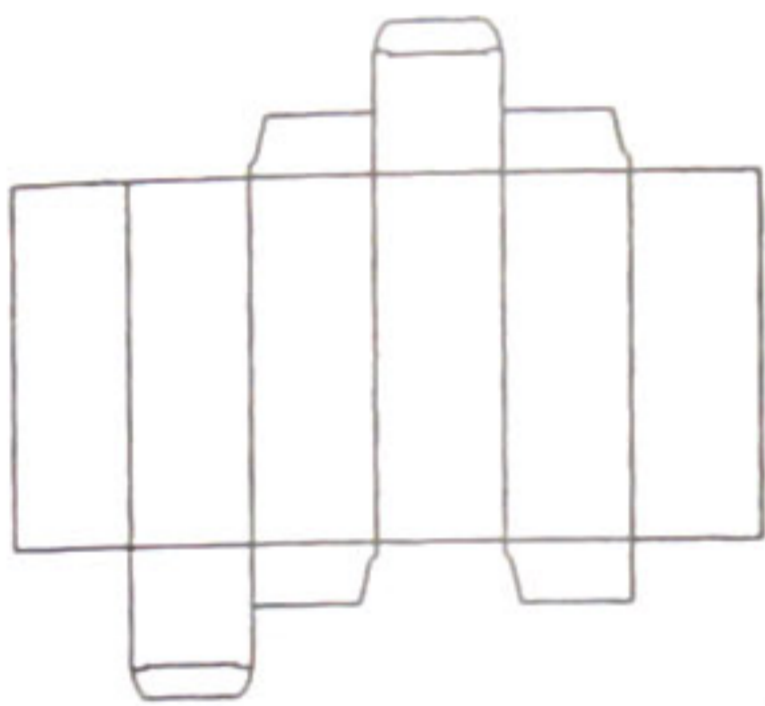
**Warning:** for patents and other protective rights see introduction page i 3, letter B.



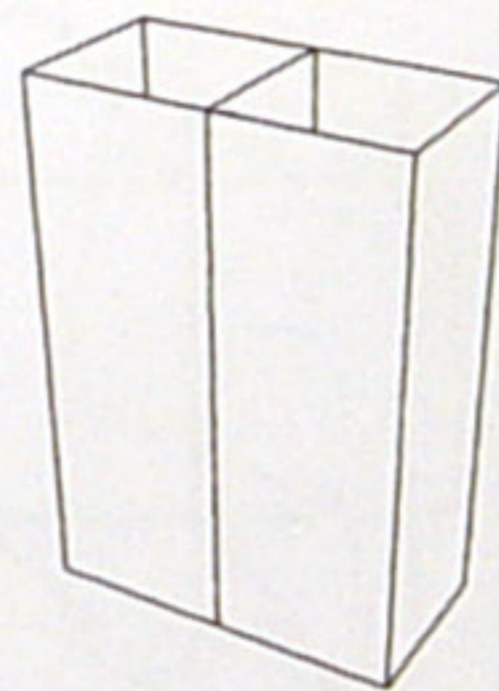
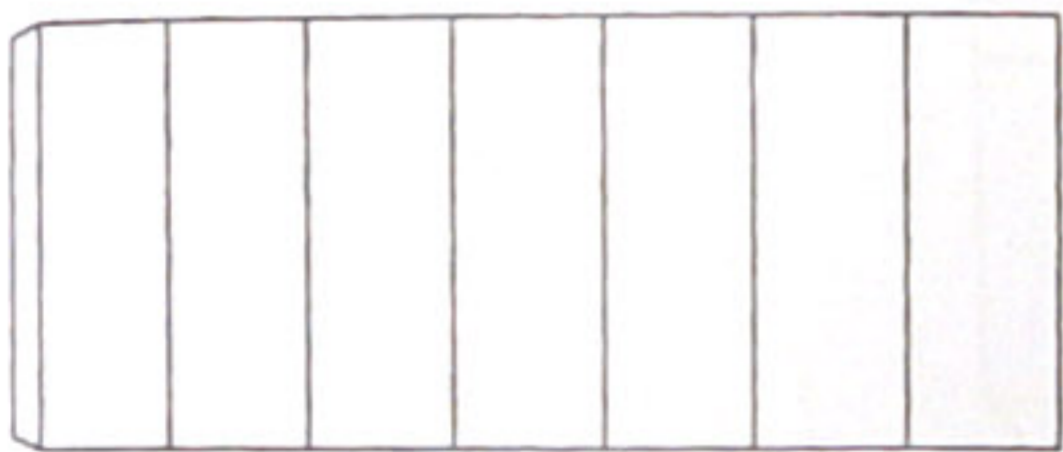
F 1001



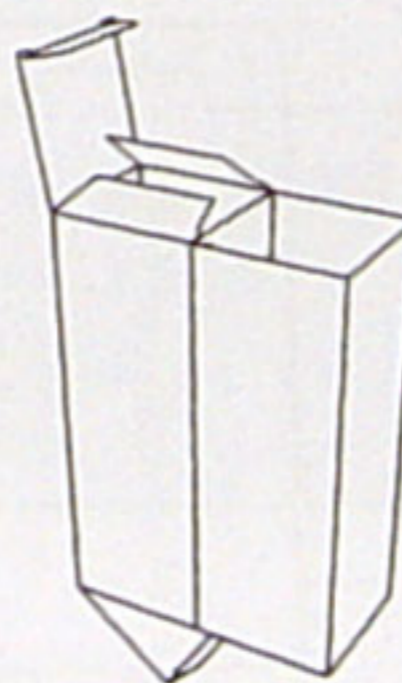
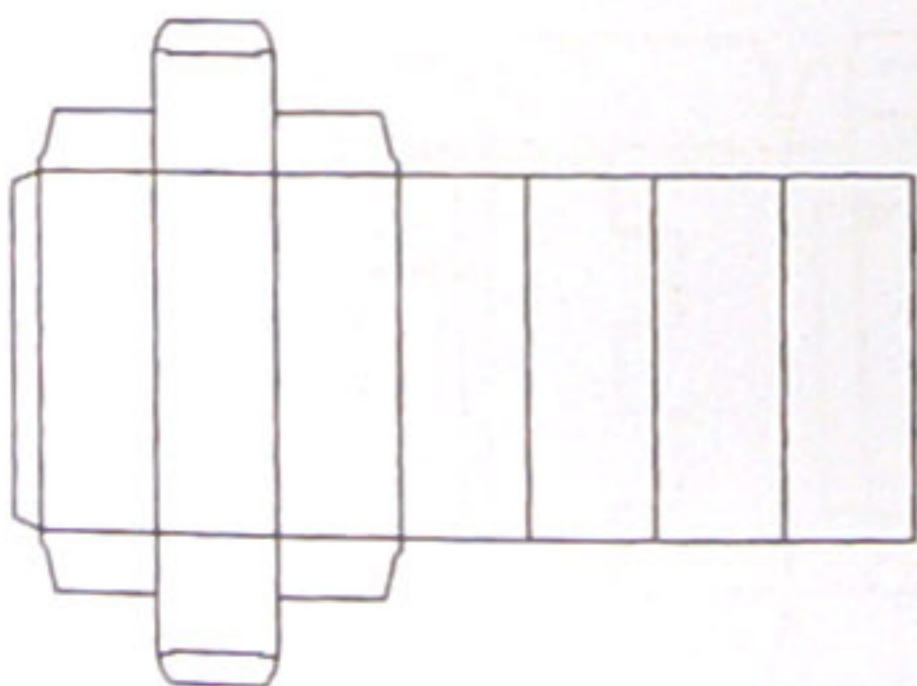
F 1002



F 1003

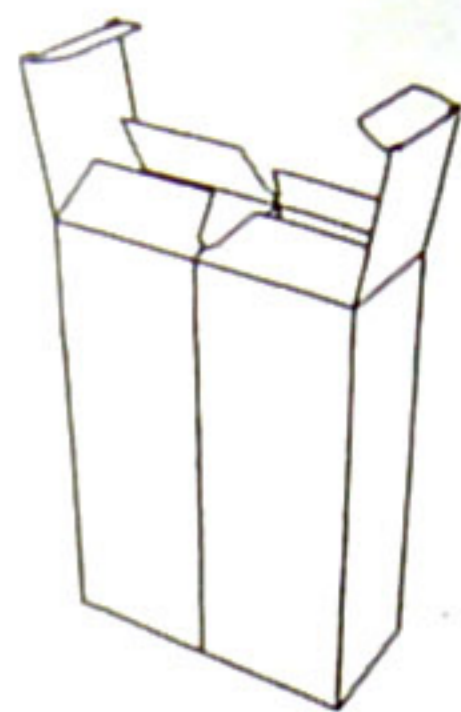
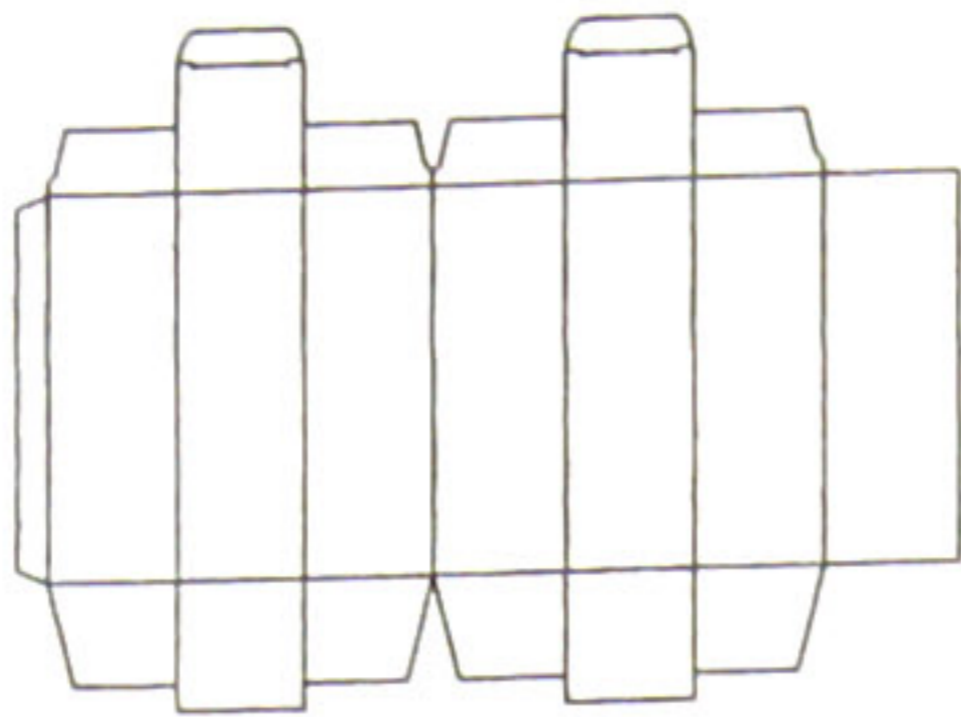


F 1011

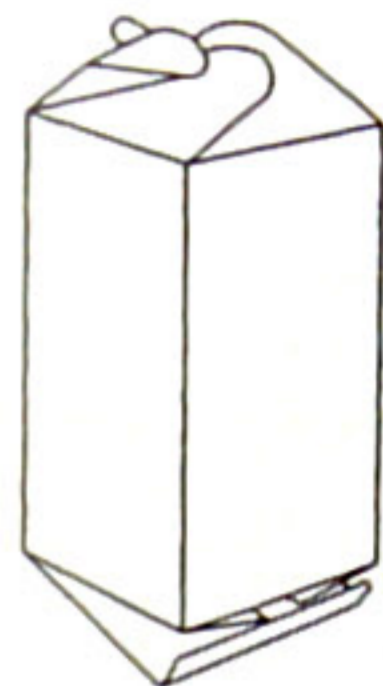
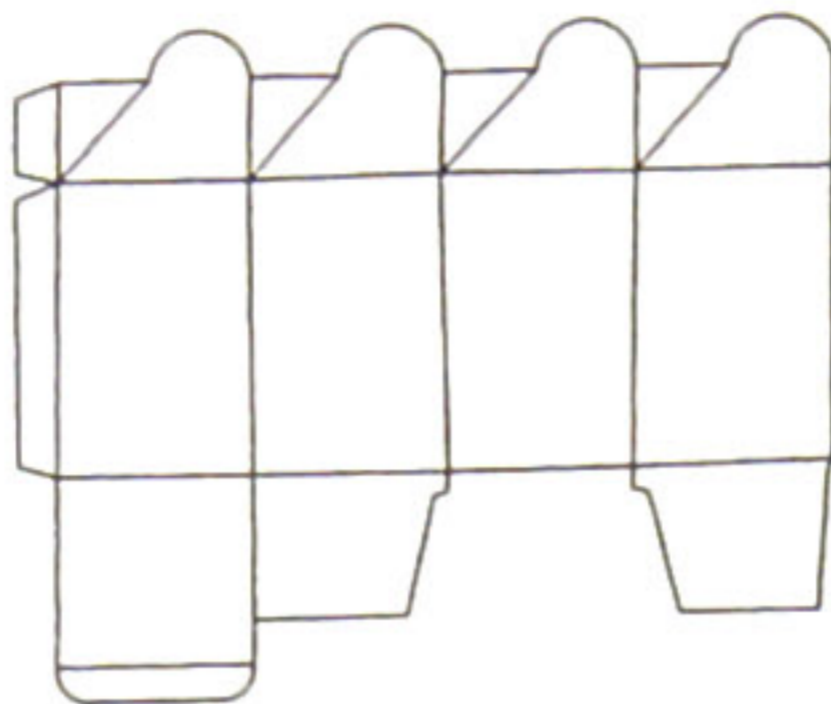


F 1012

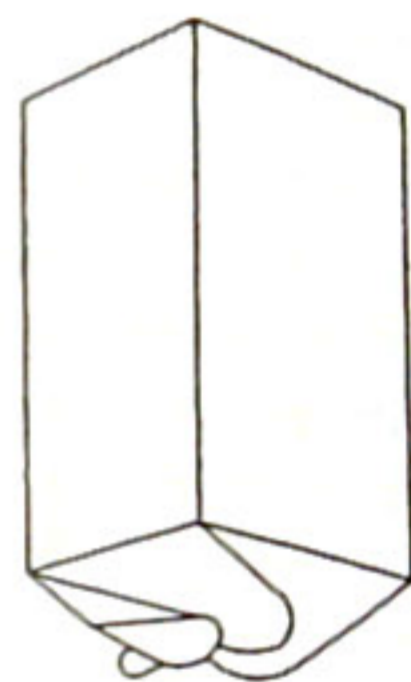
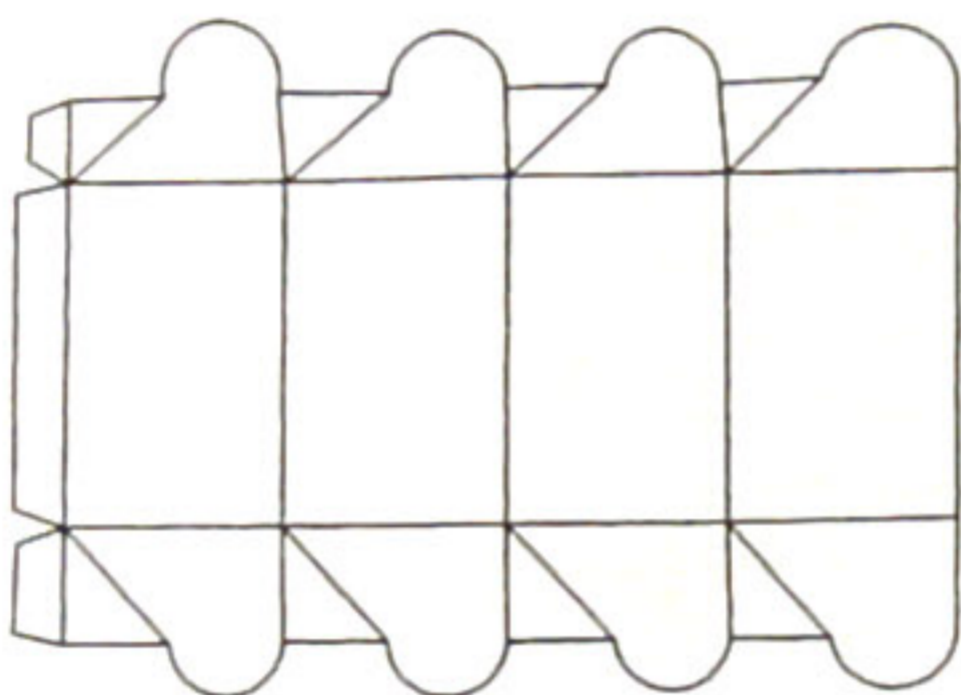
F 1013



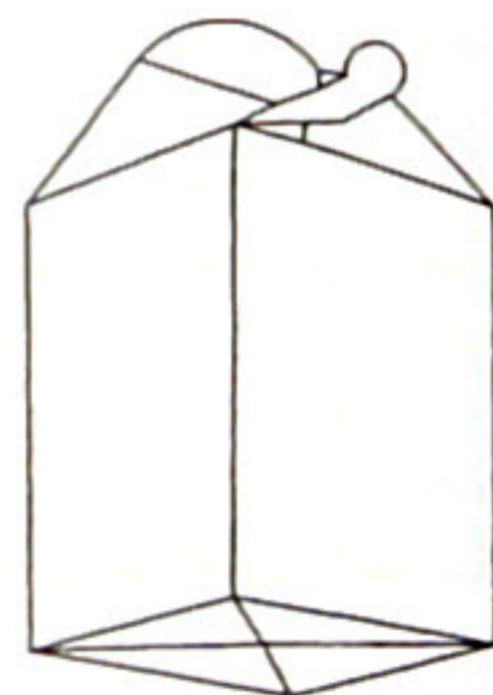
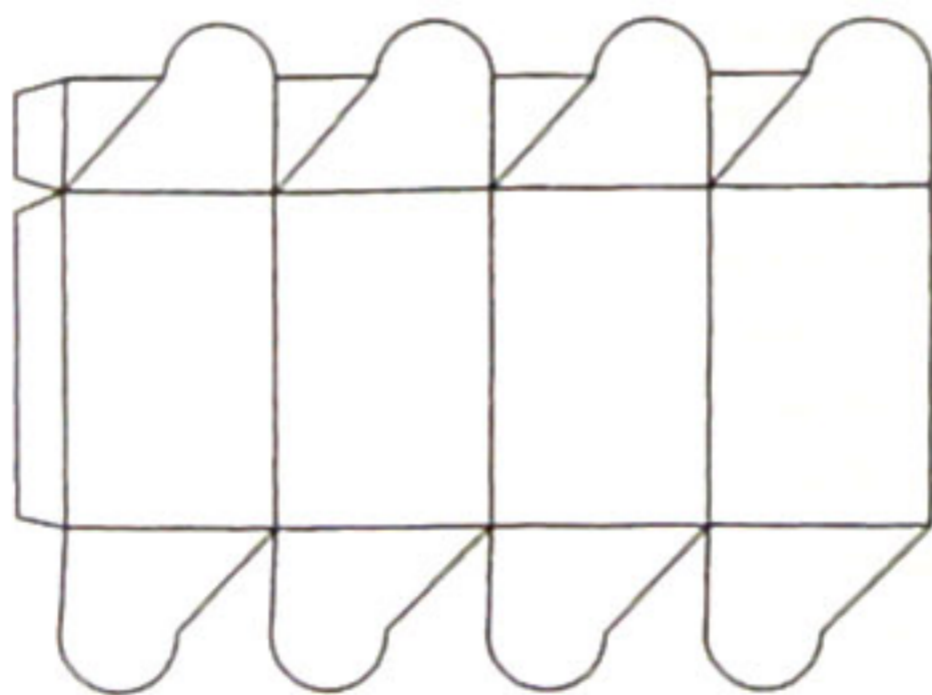
F 1021



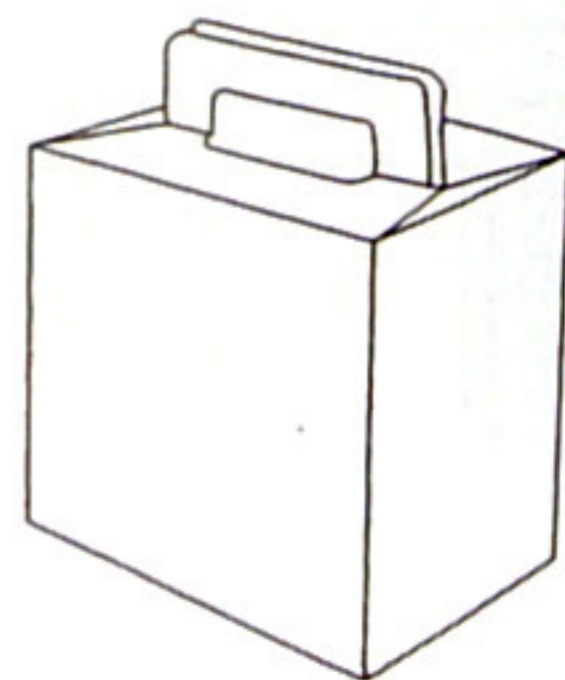
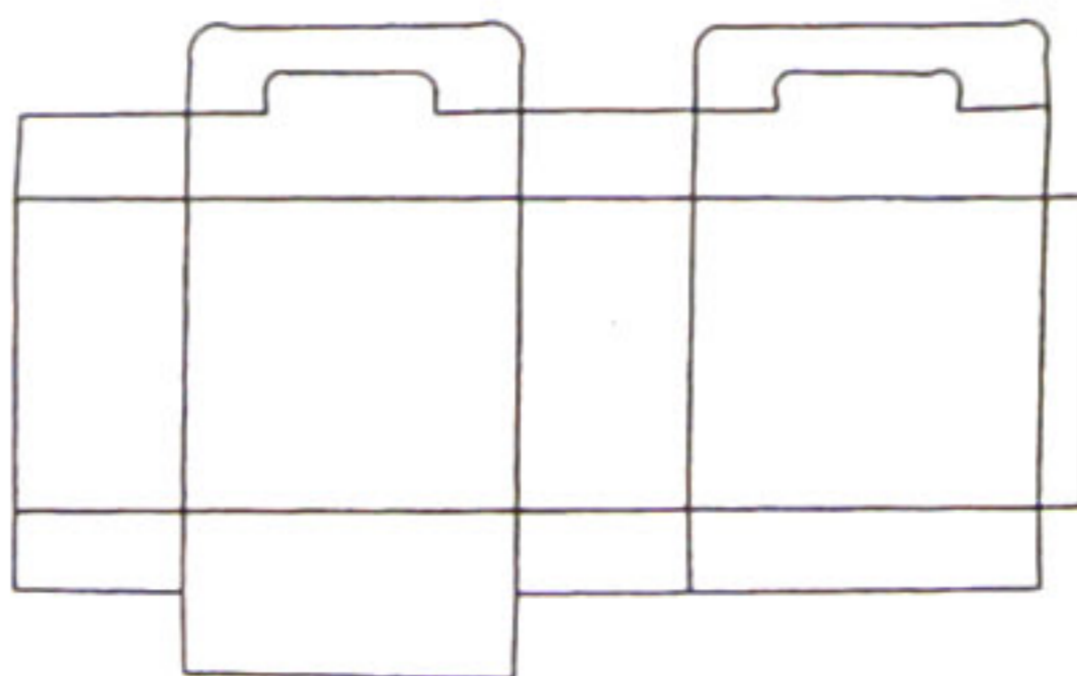
F 1022



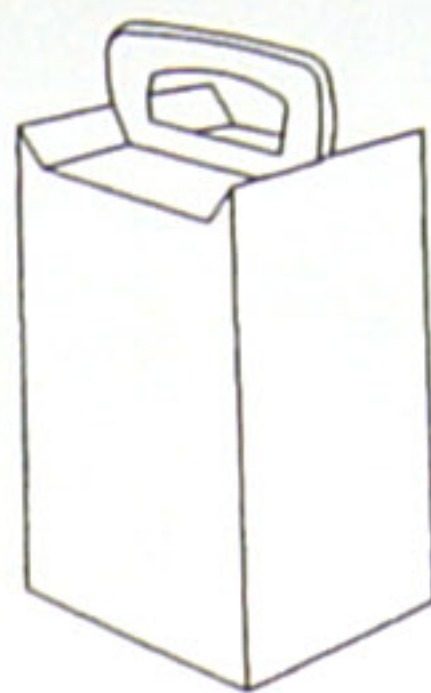
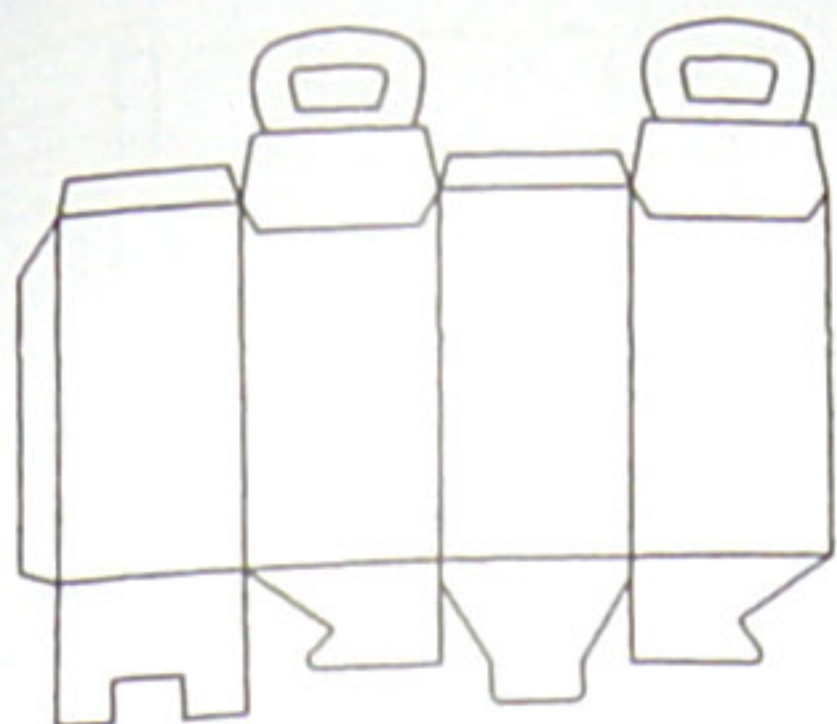
F 1023



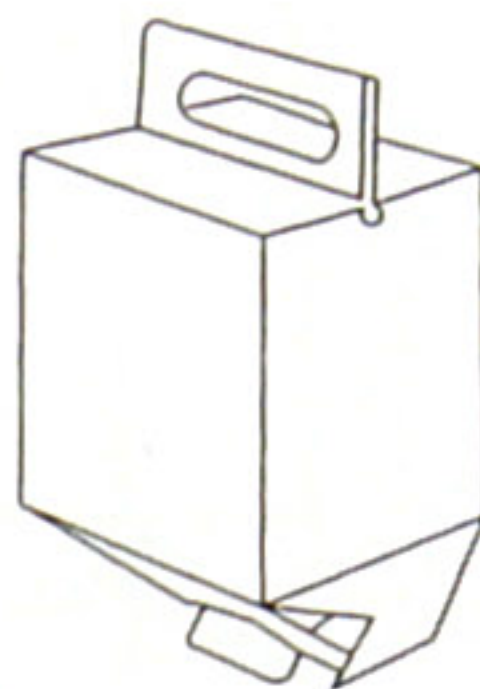
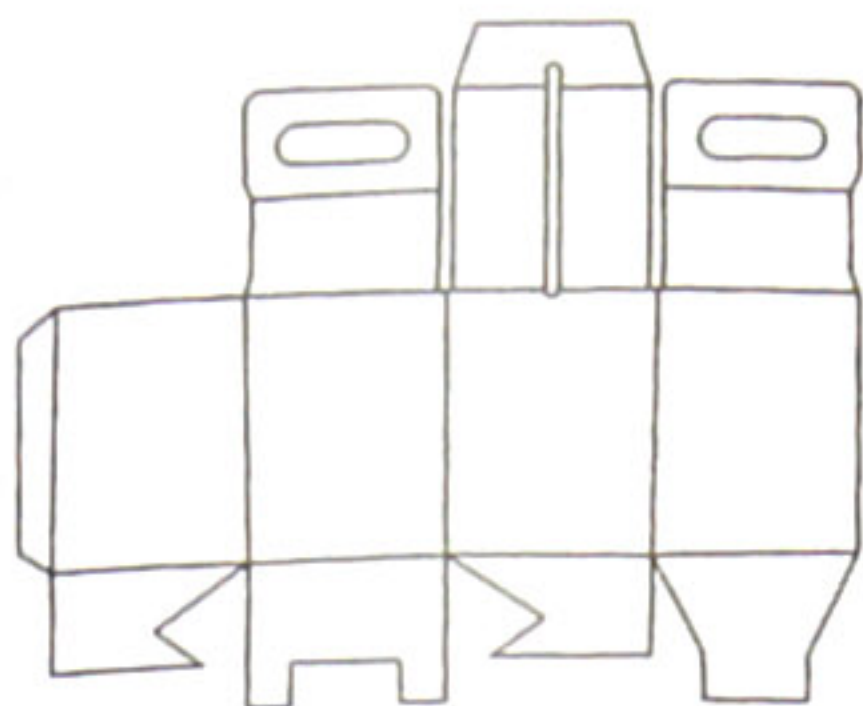
F 1031



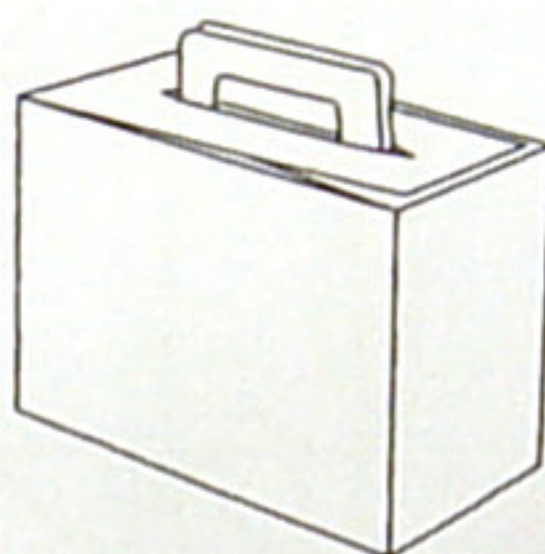
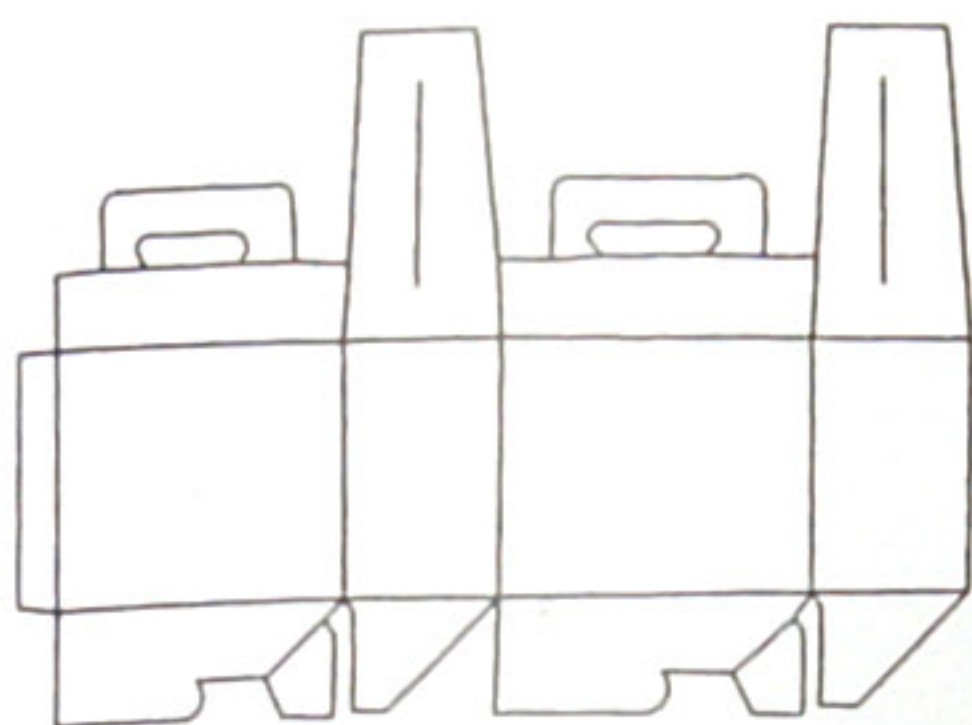




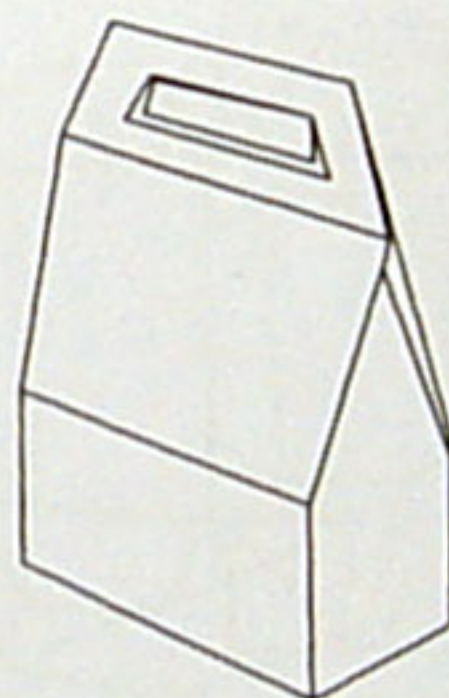
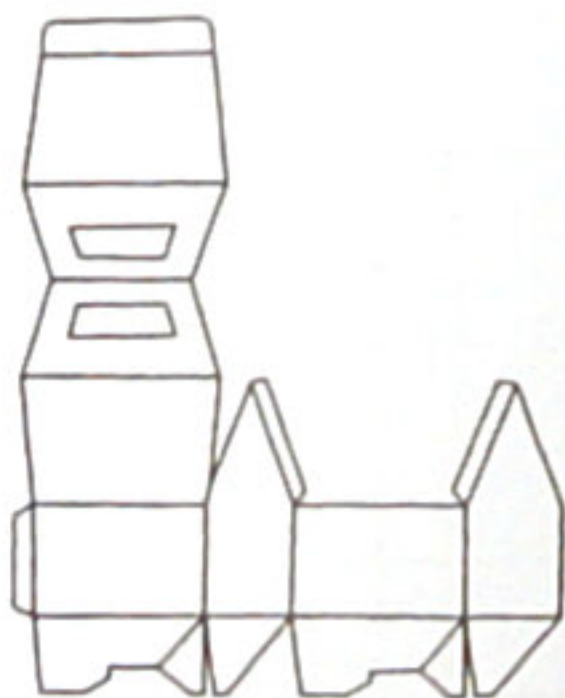
F 1032



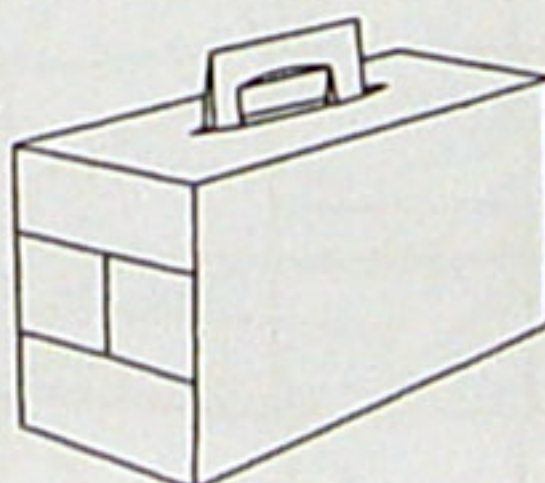
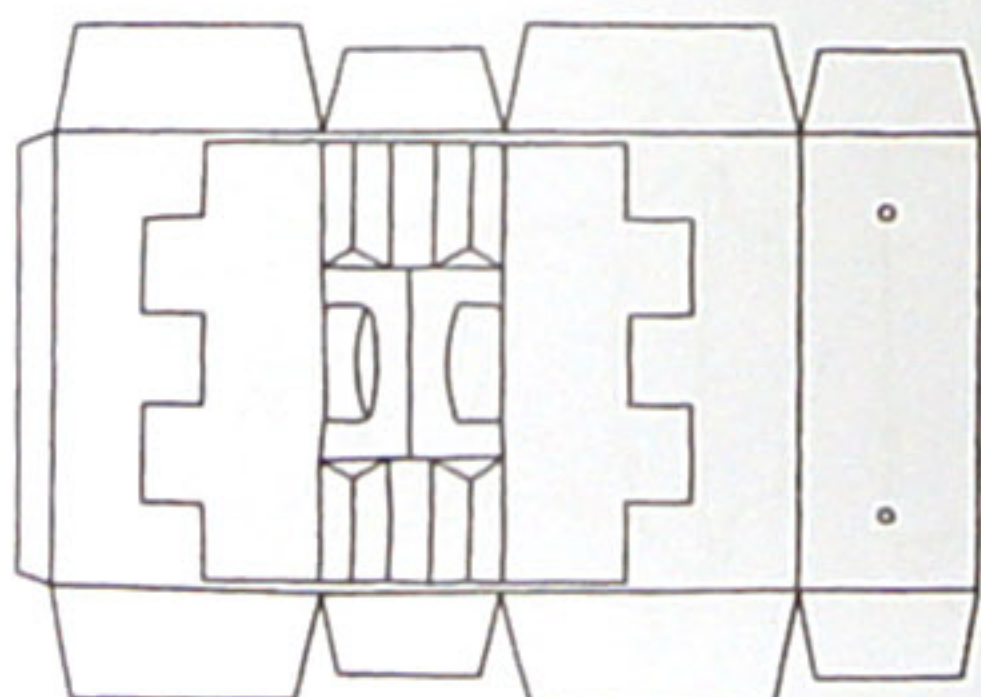
F 1033



F 1034

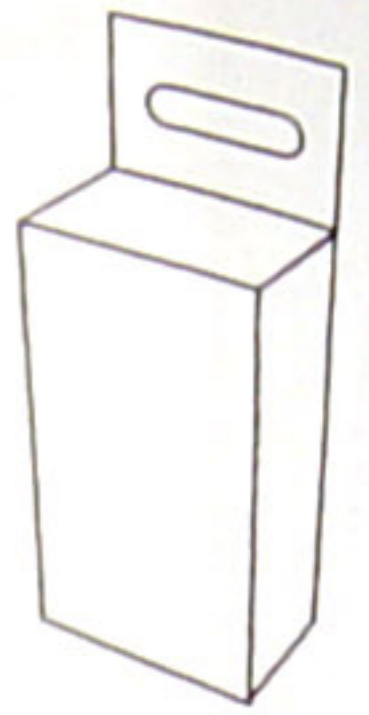
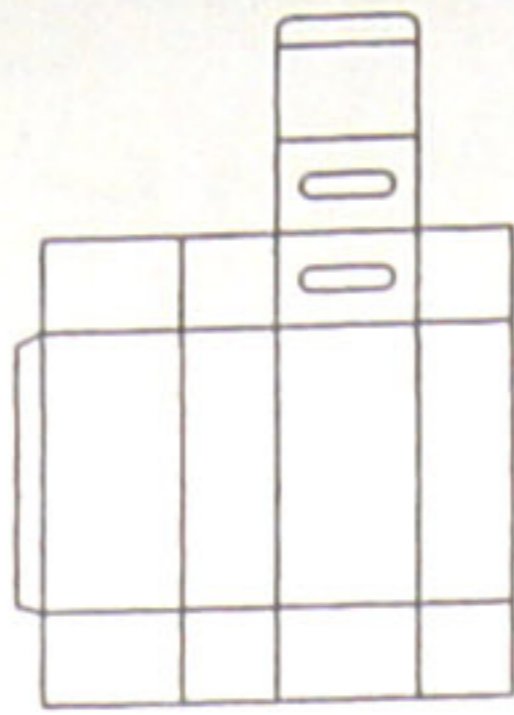


F 1035

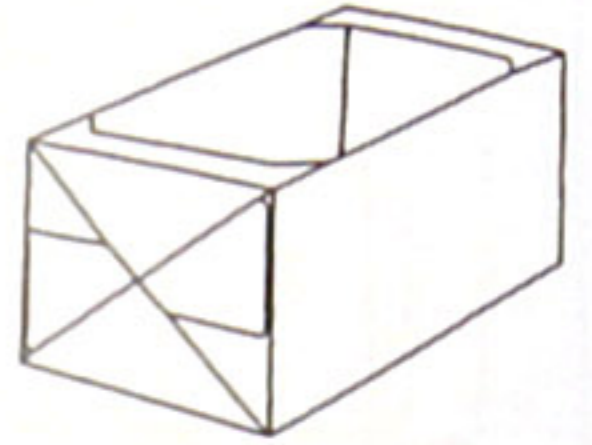
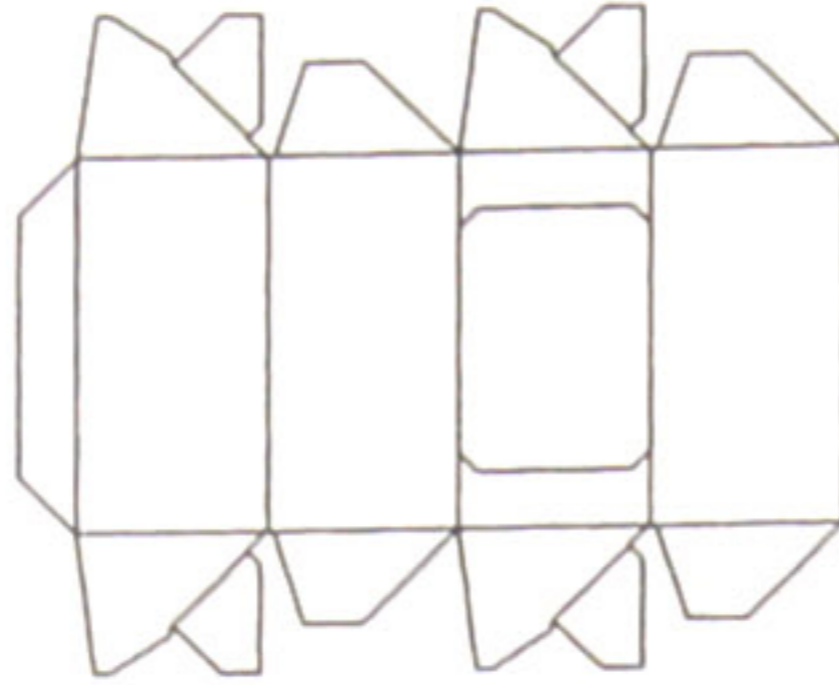


F 1036

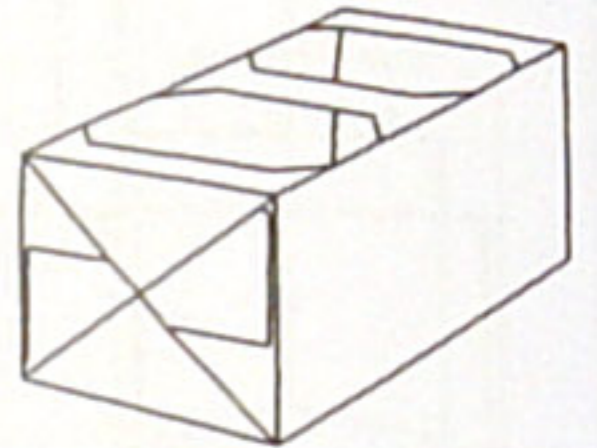
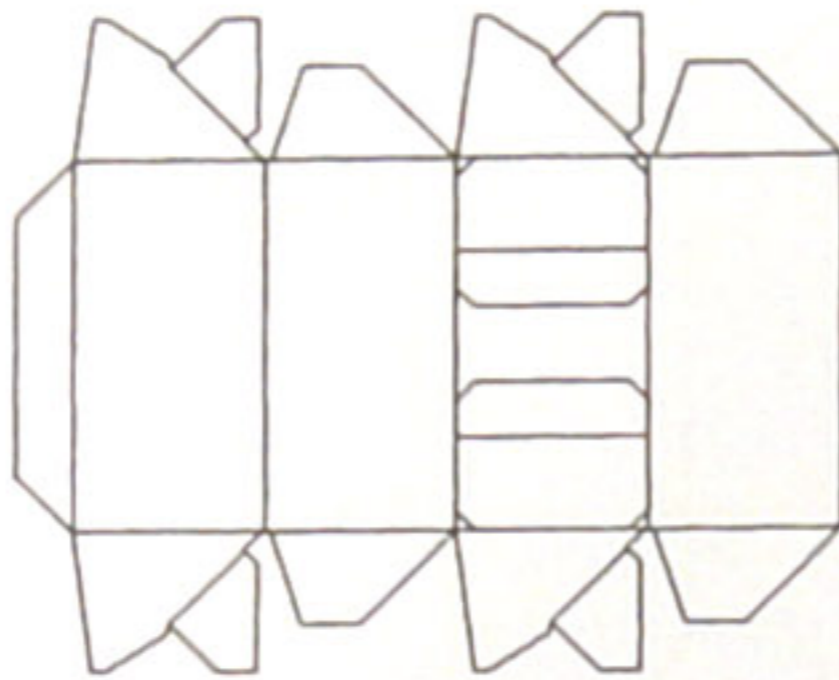
F 1037



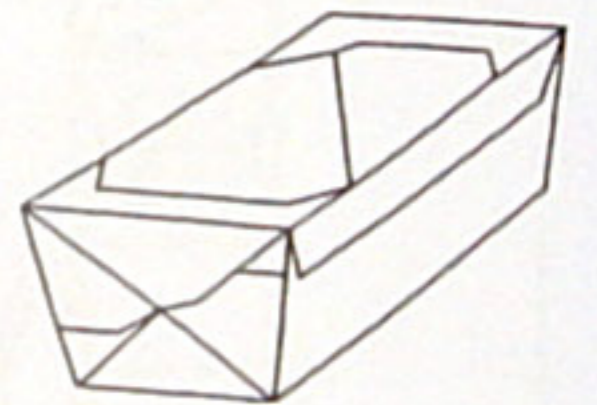
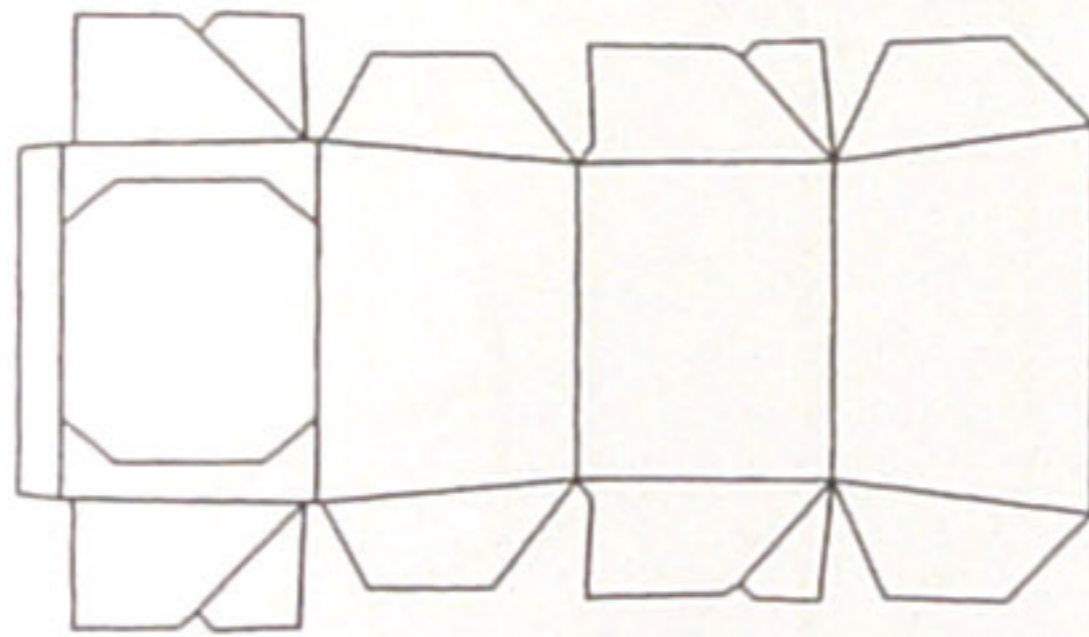
F 1041



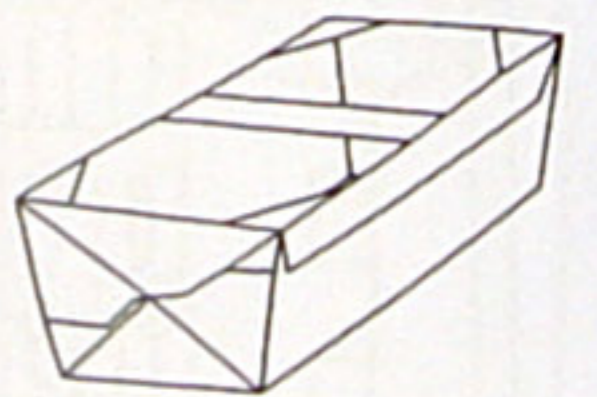
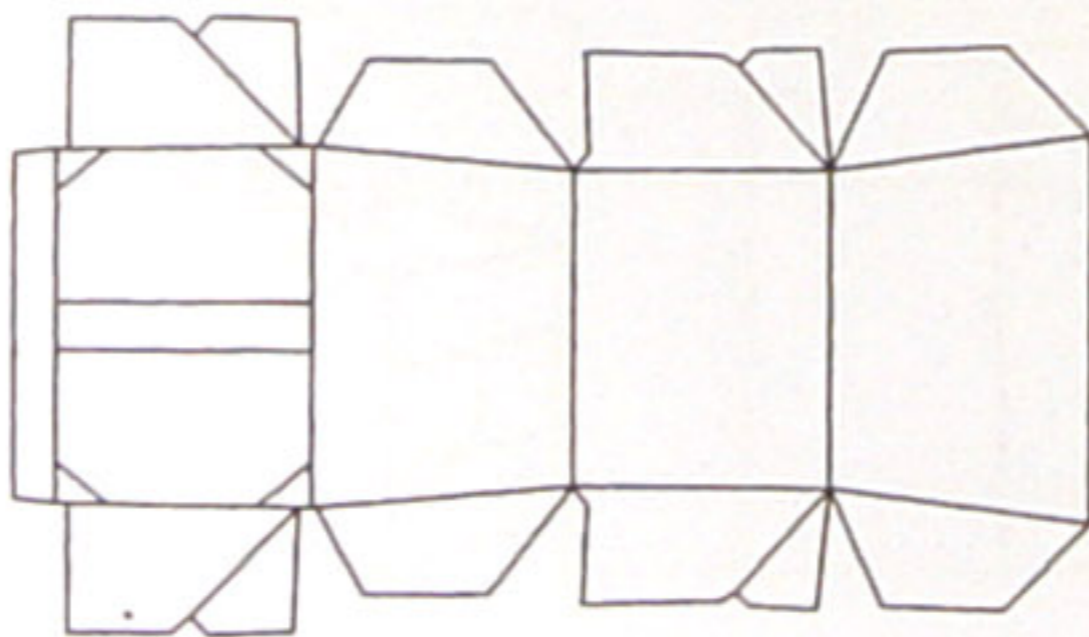
F 1042

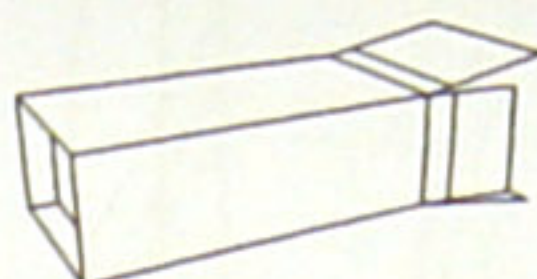
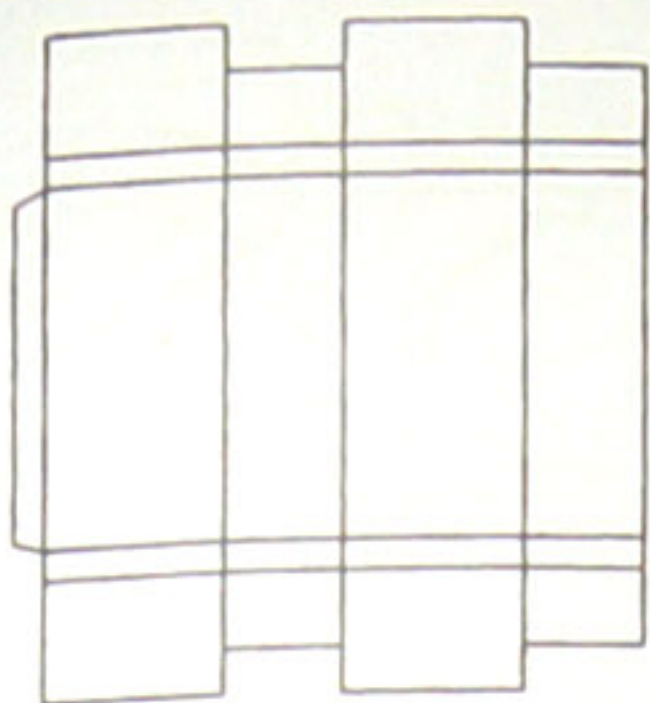


F 1045

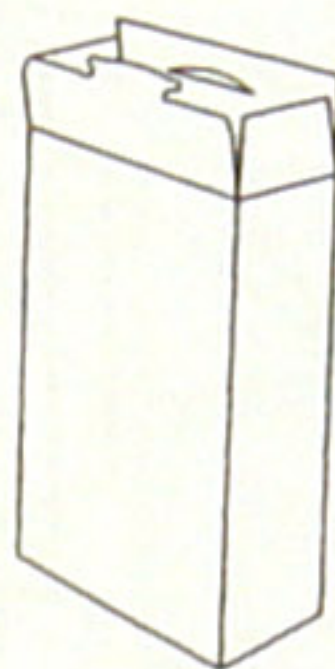
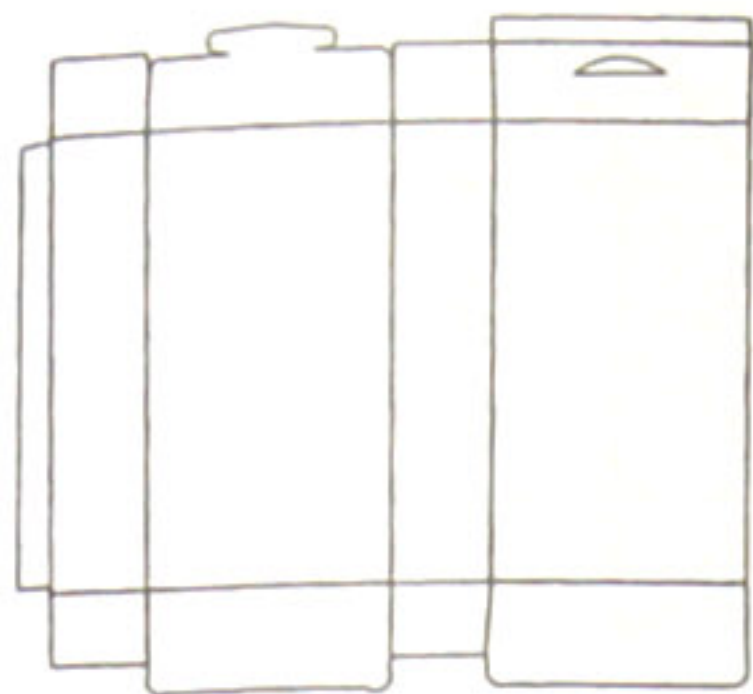


F 1046

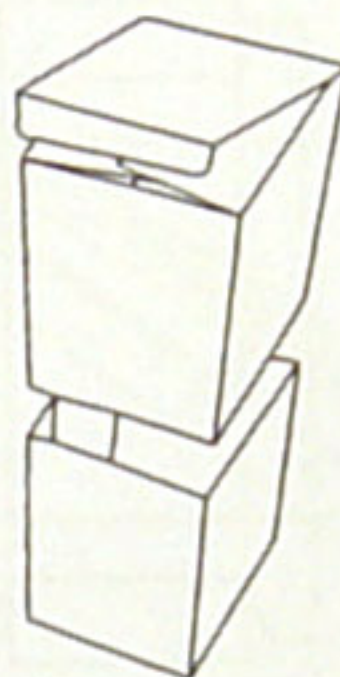
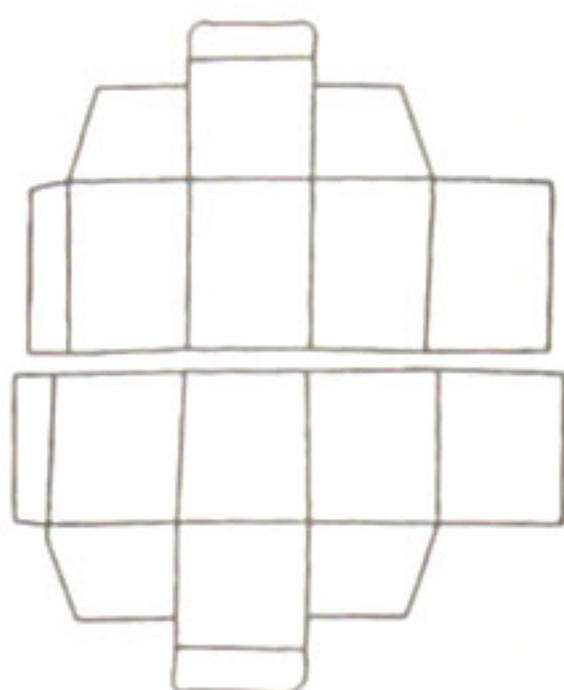




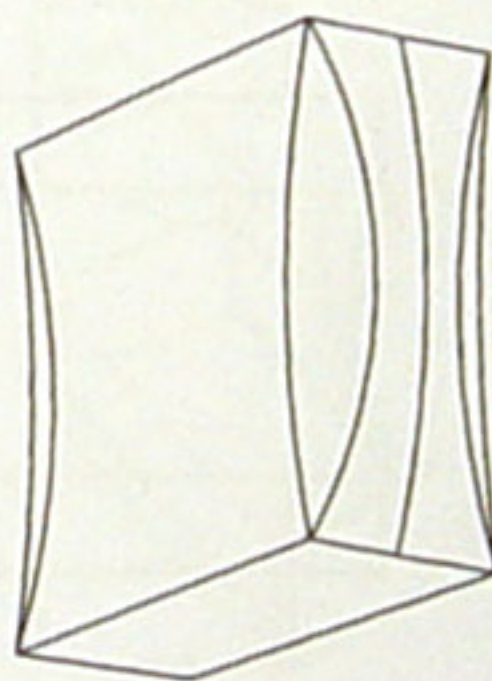
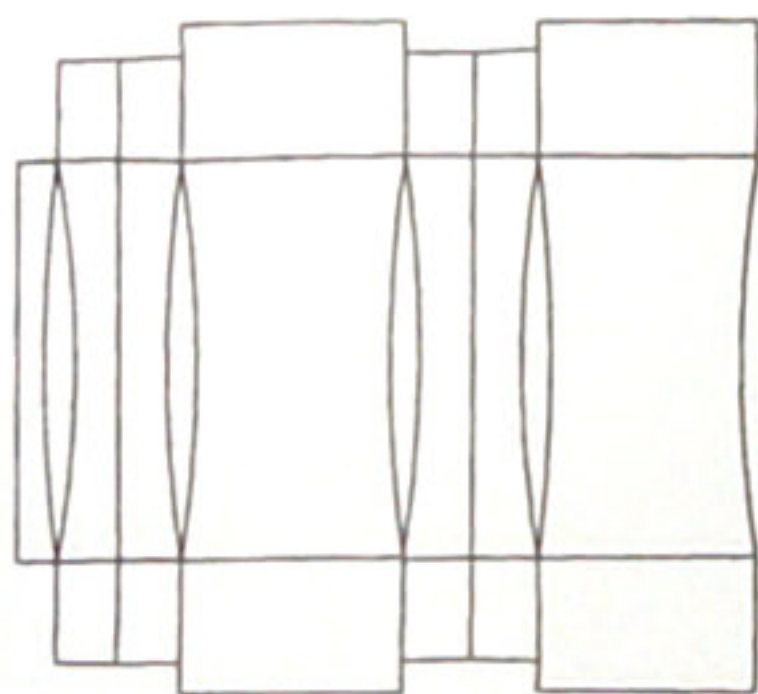
F 1051



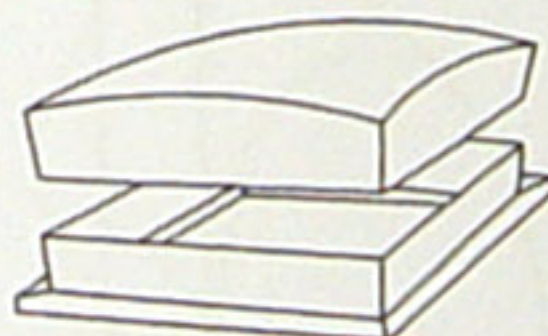
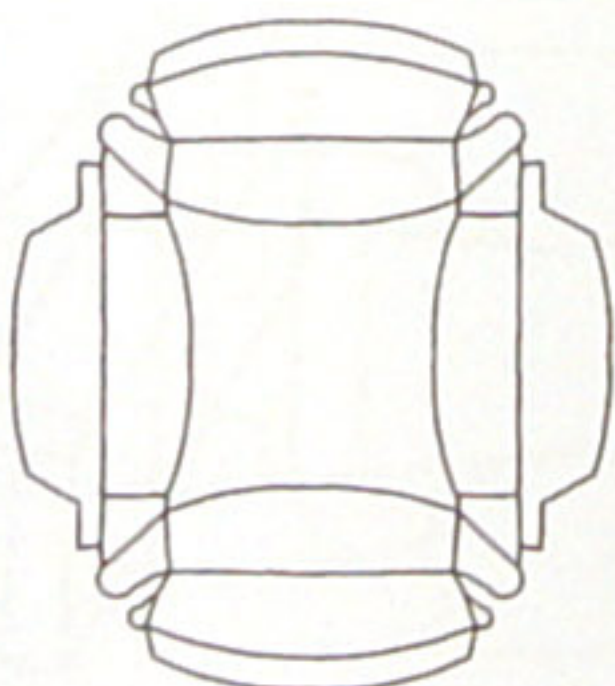
F 1081



F 1082

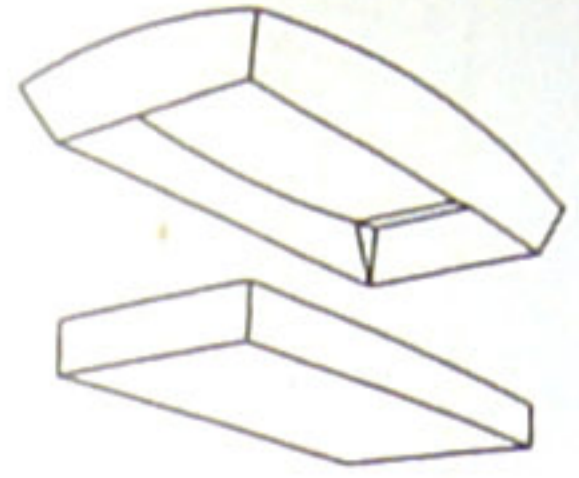
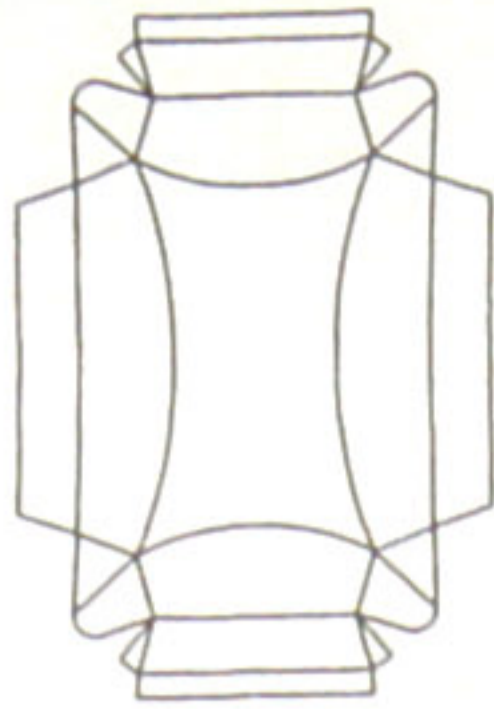


F 1083

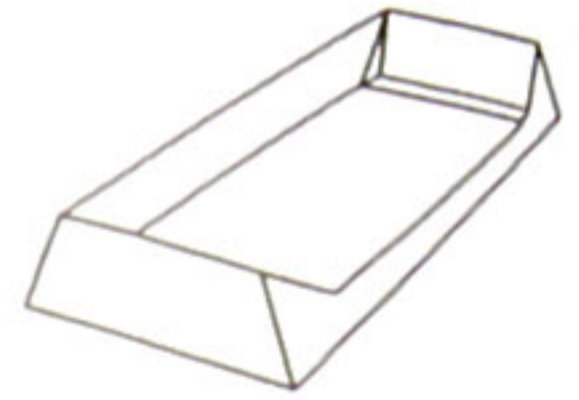
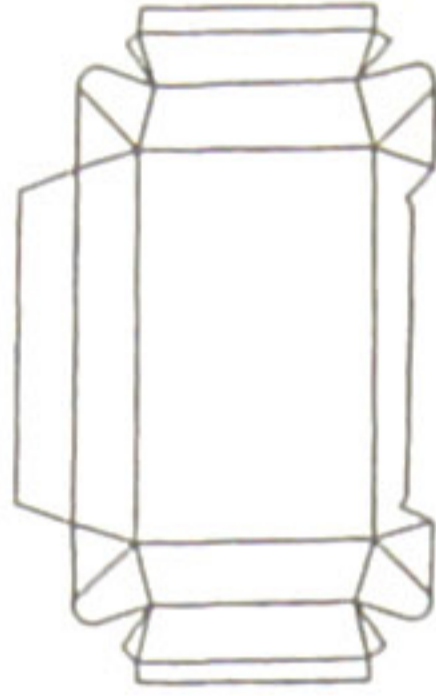


F 2001

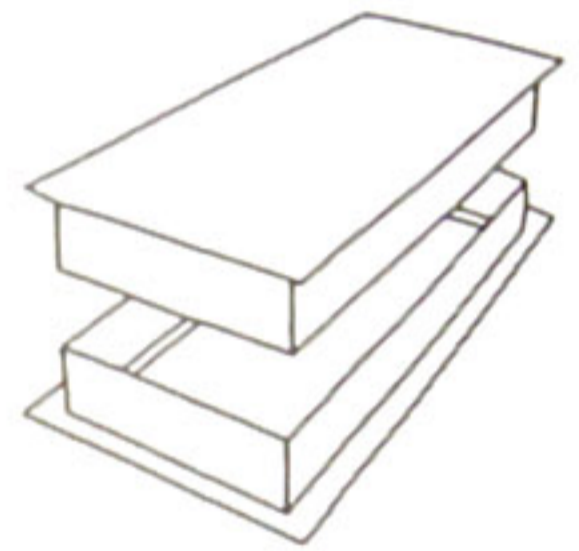
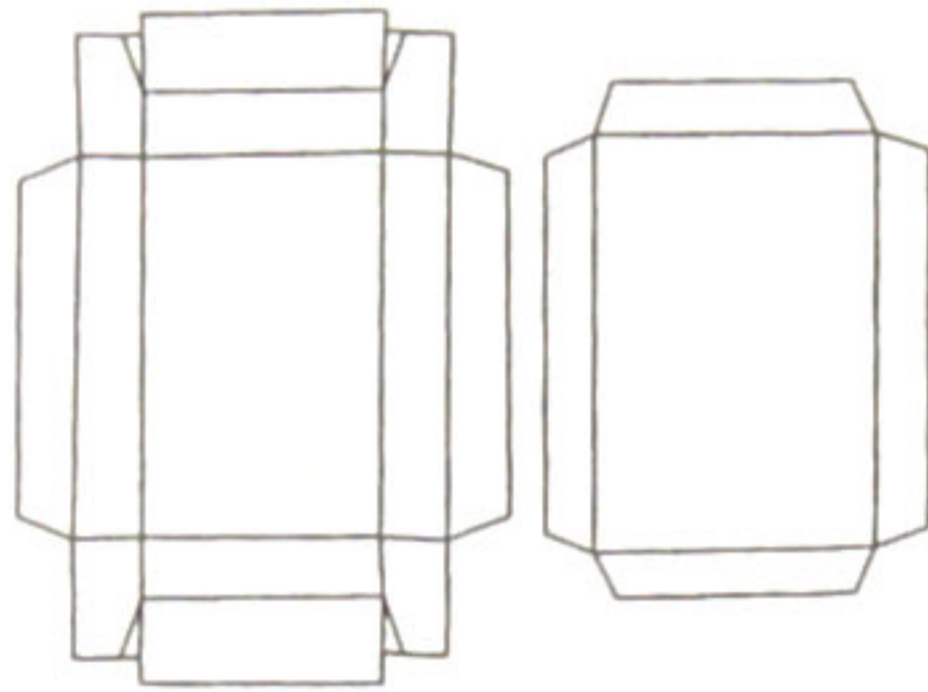
F 2002



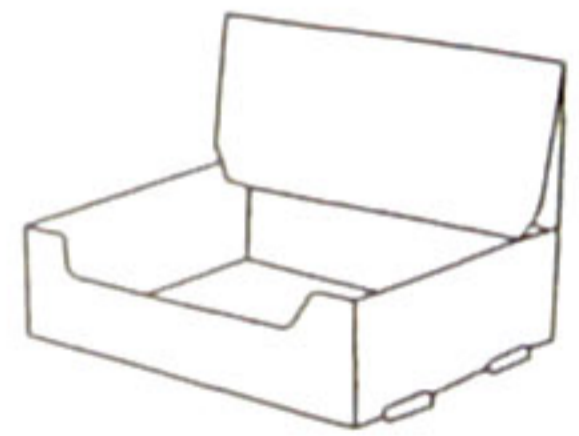
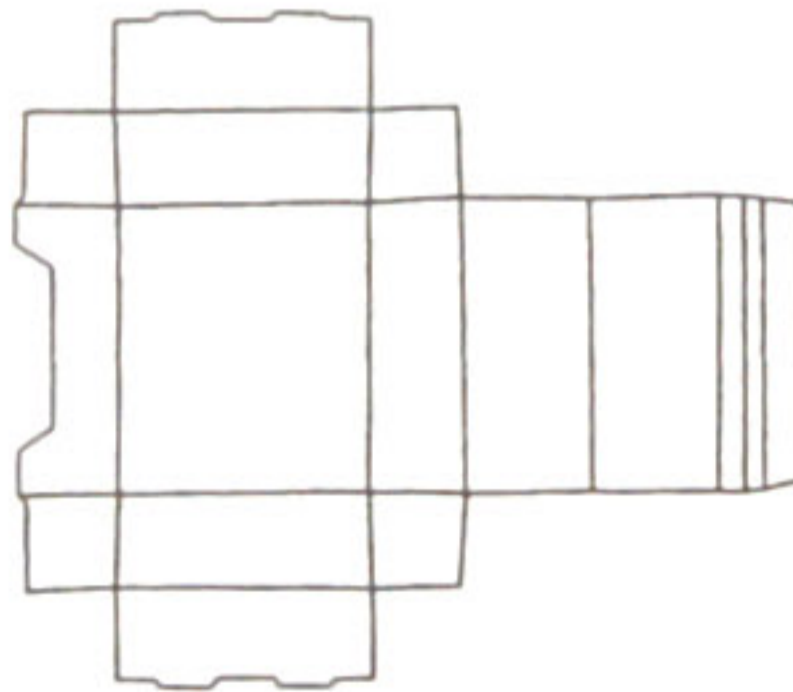
F 2003



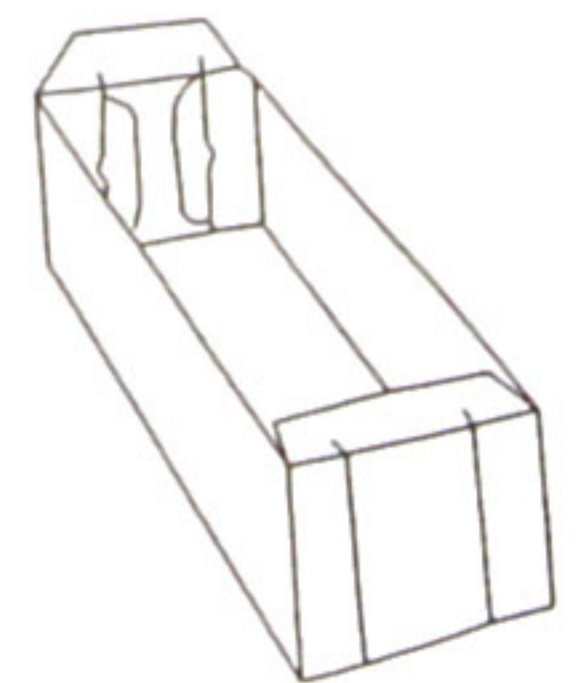
F 2004

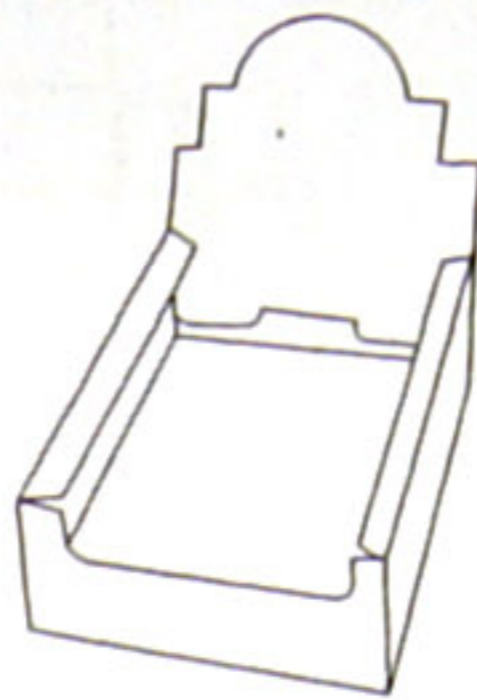
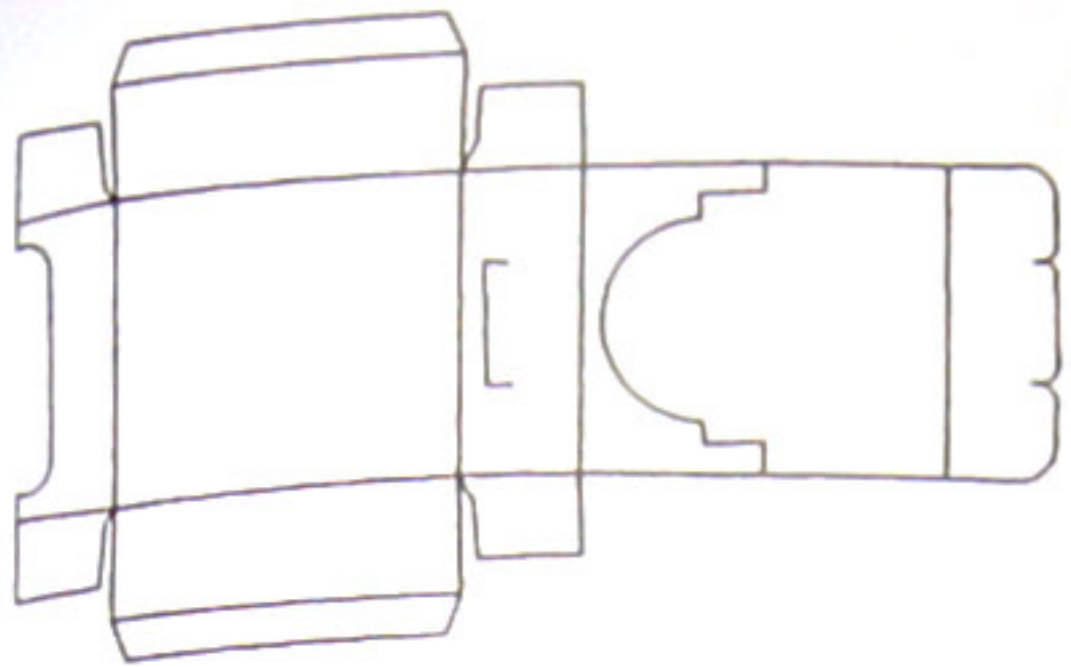


F 2011

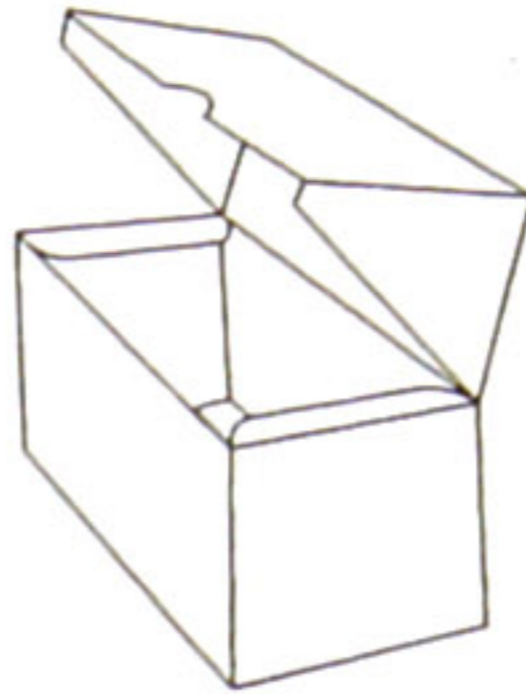
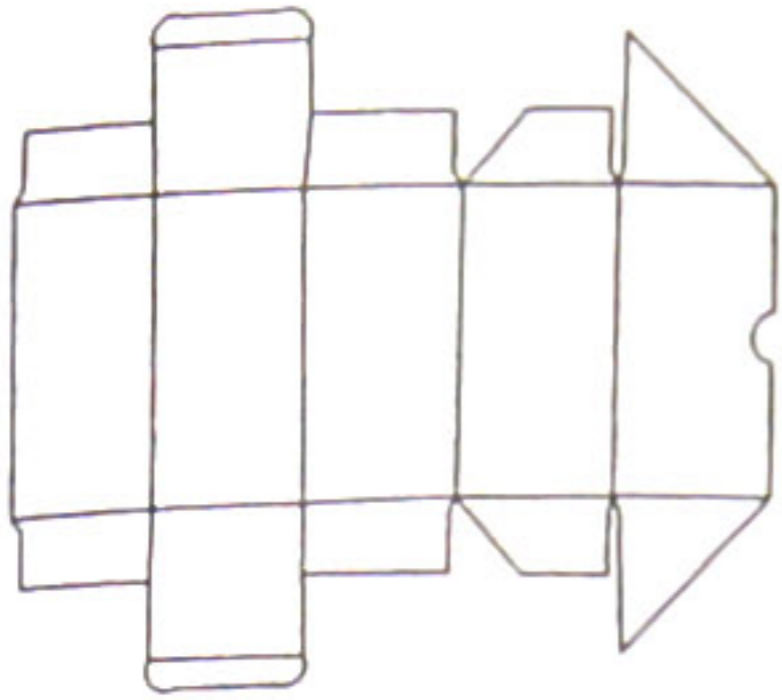


F 2021

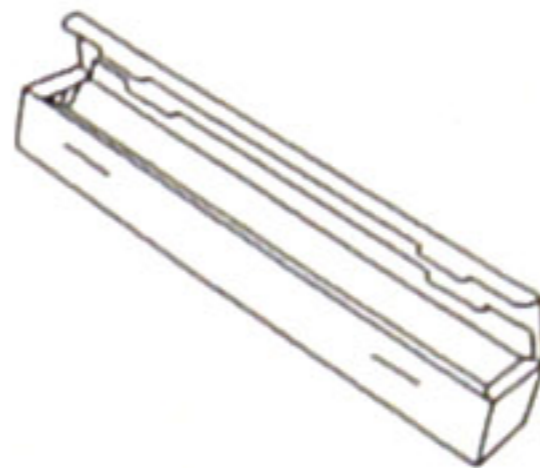
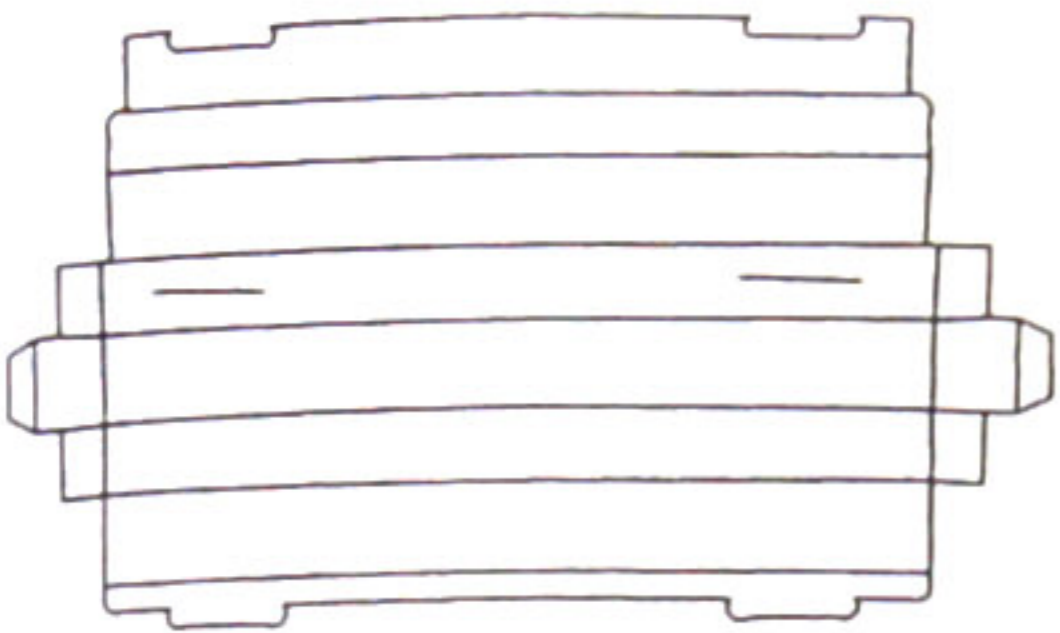




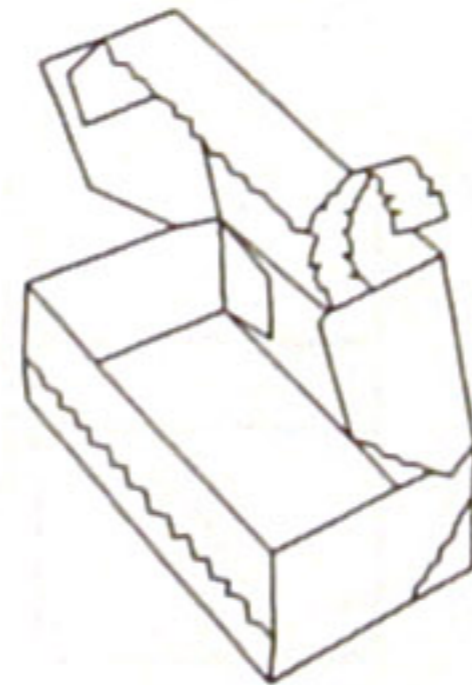
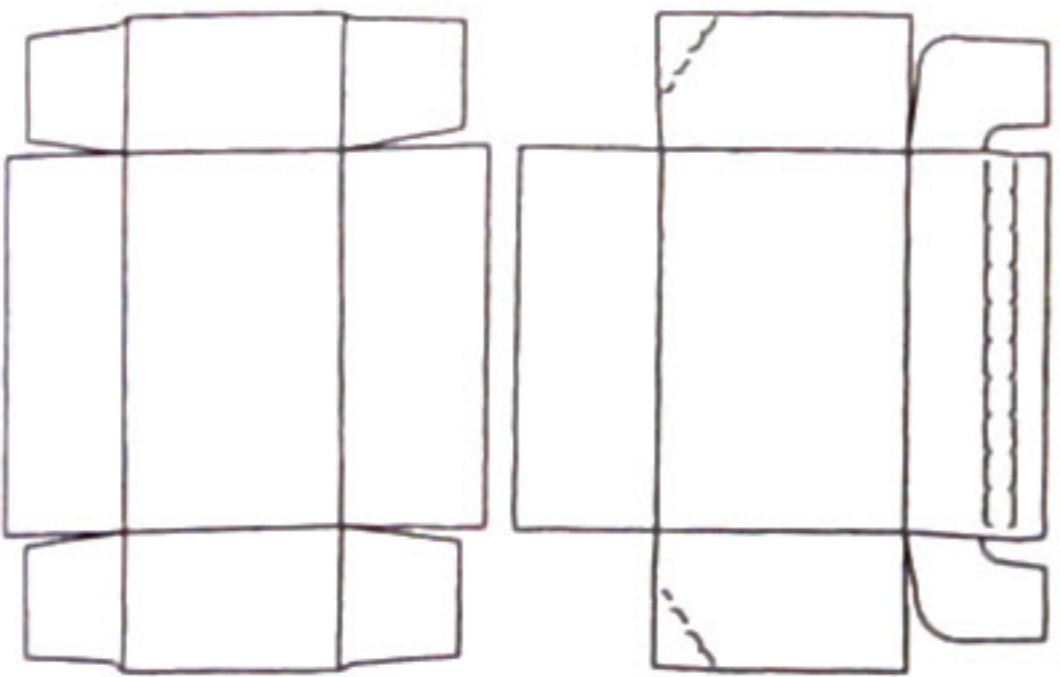
F 2031



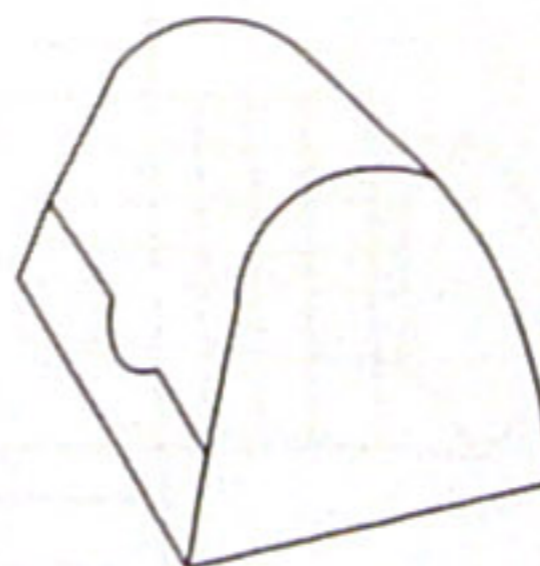
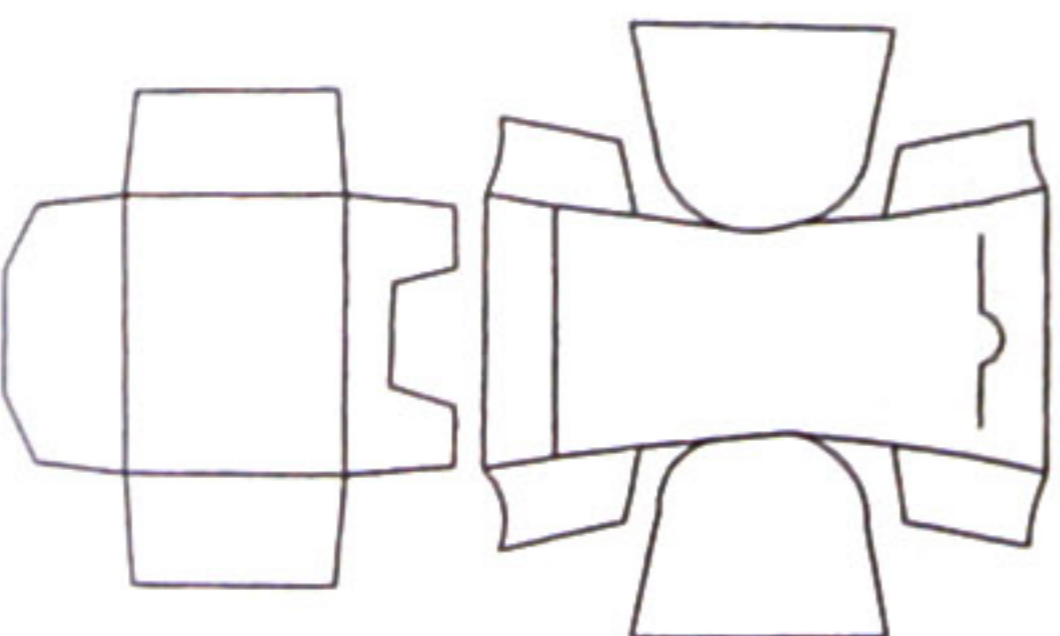
F 2032



F 2033

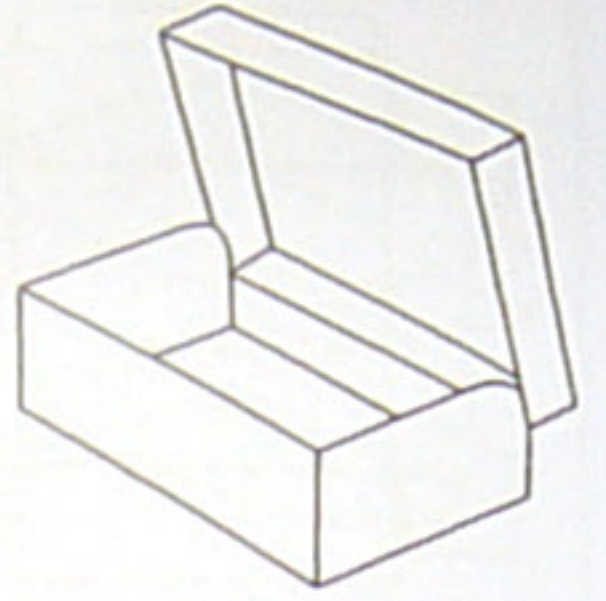
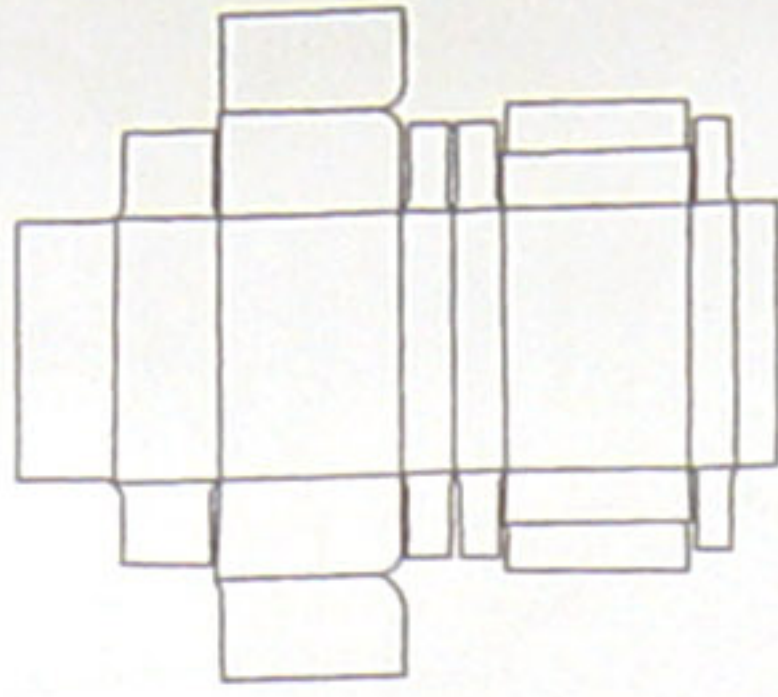


F 2034

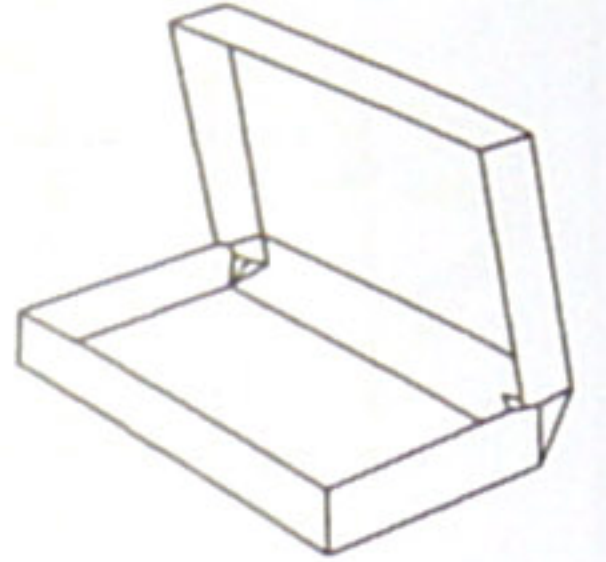
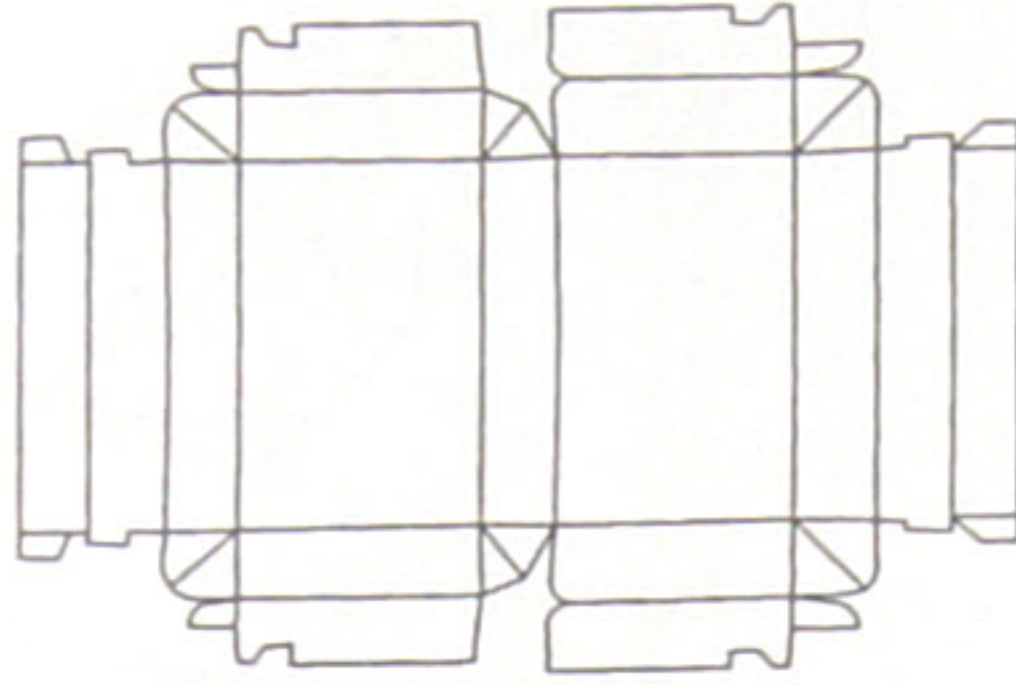


F 2035

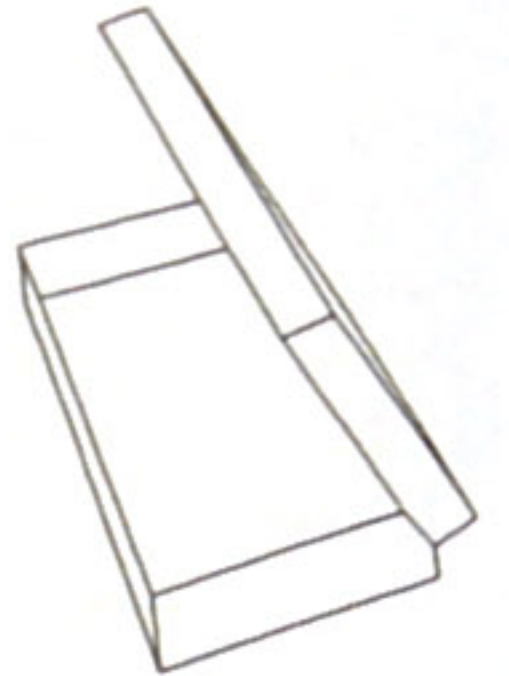
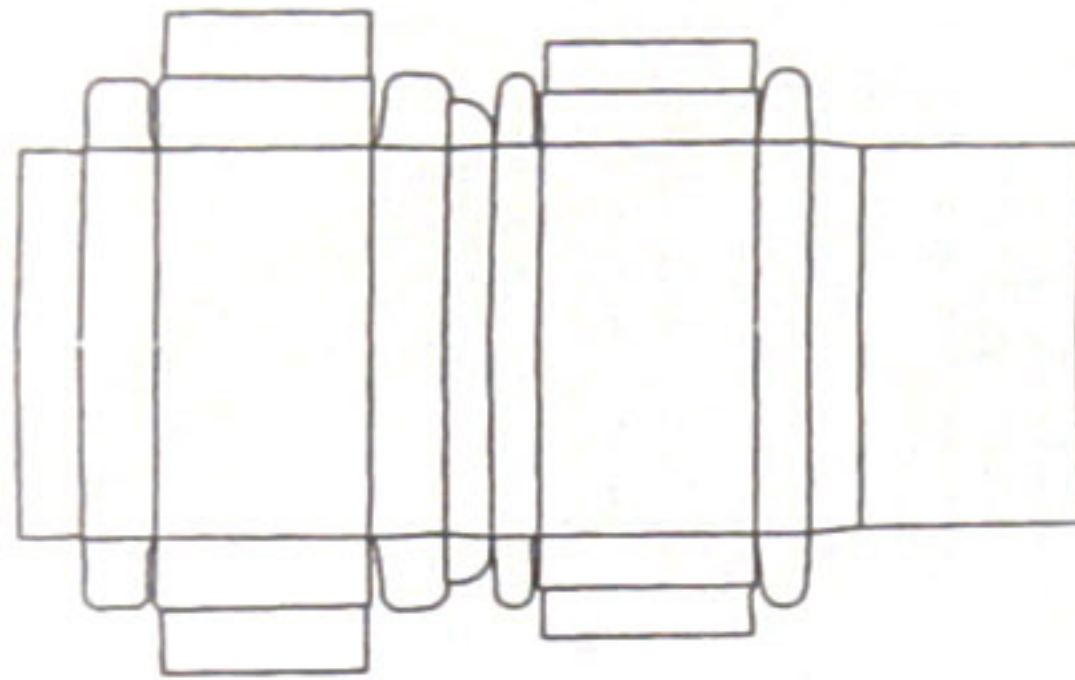
F 2041



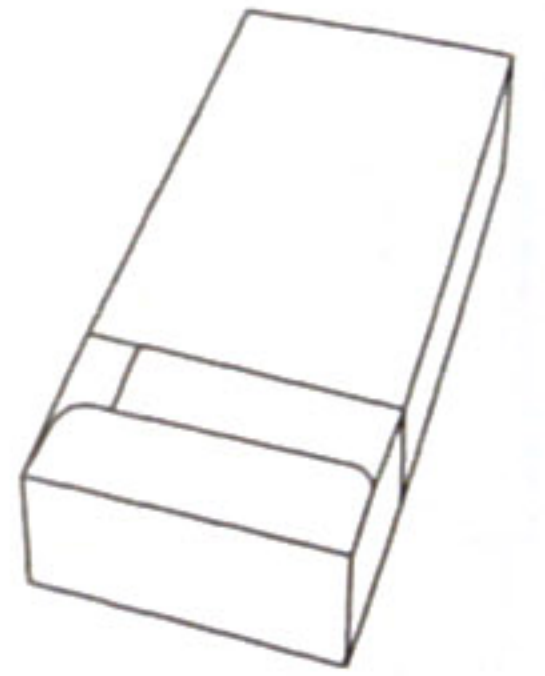
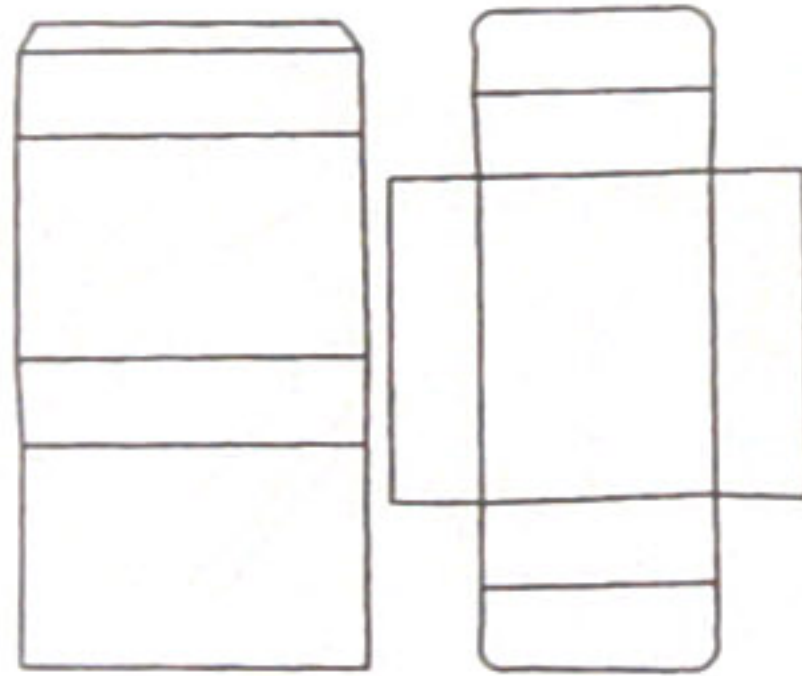
F 2042



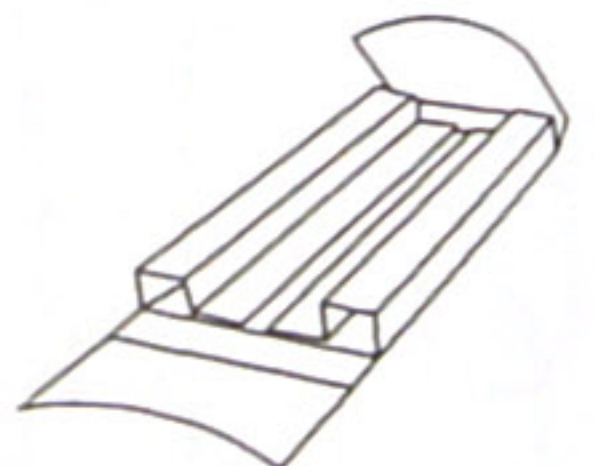
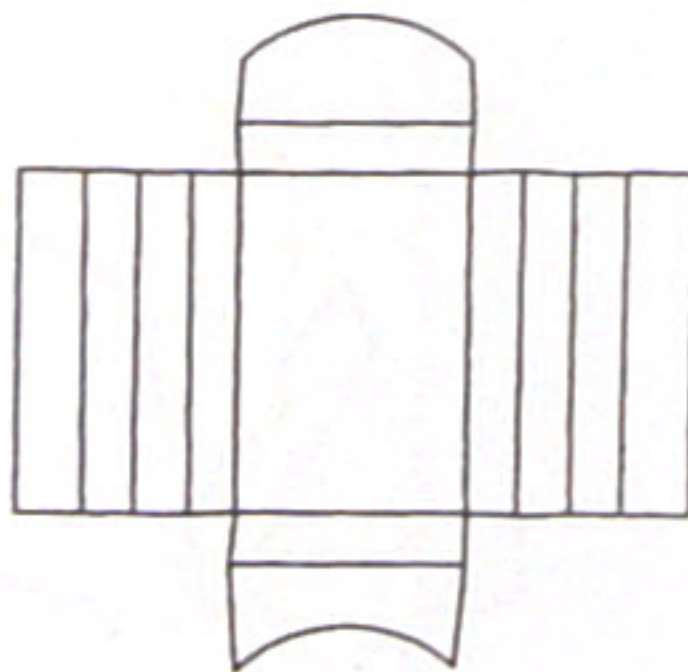
F 2043

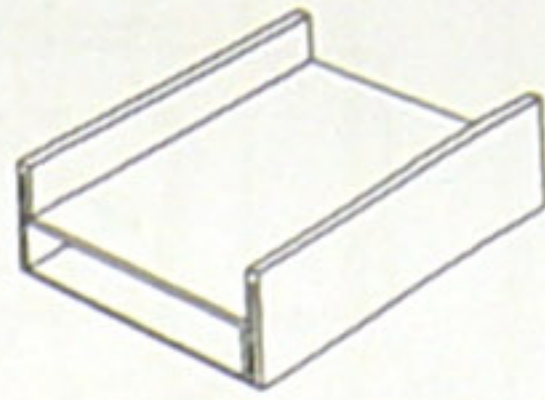
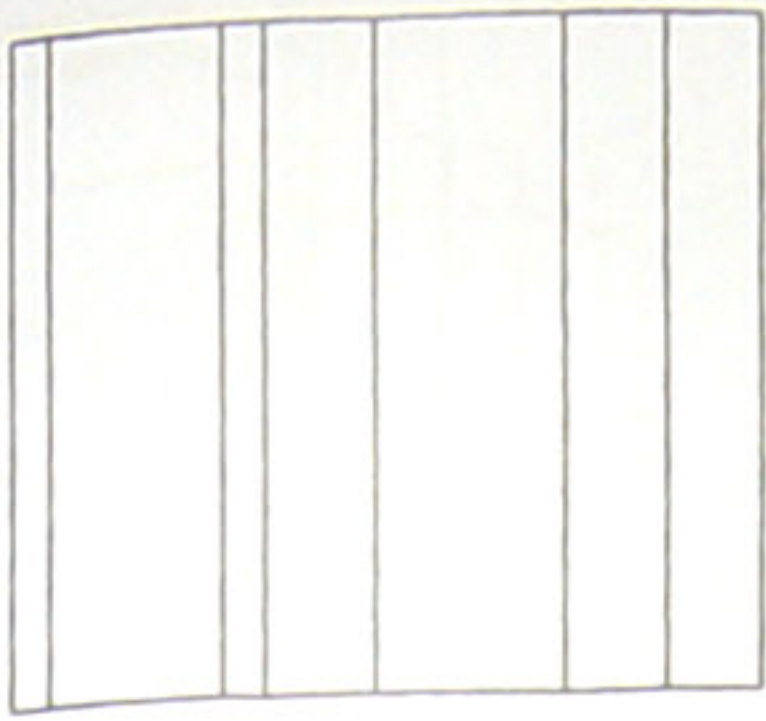


F 2051

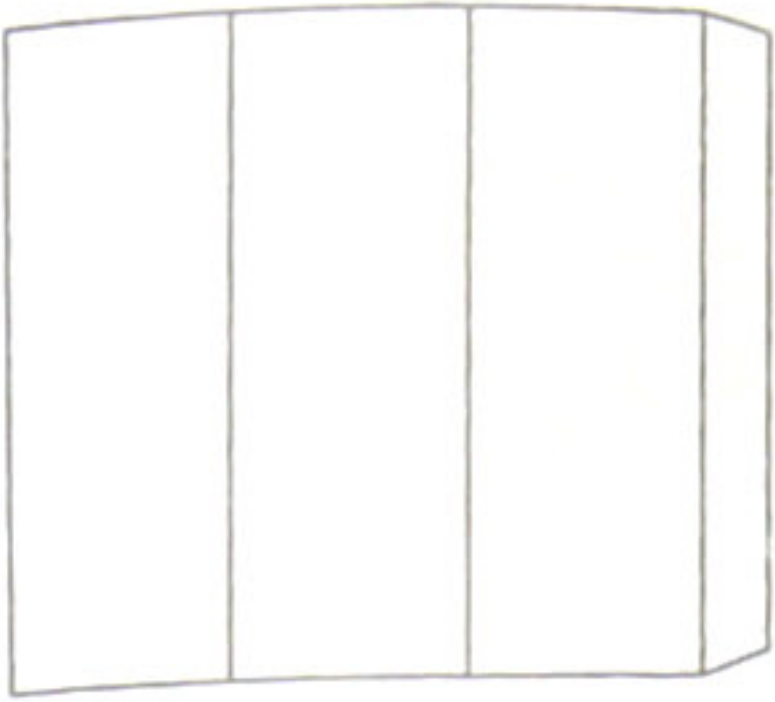


F 2052

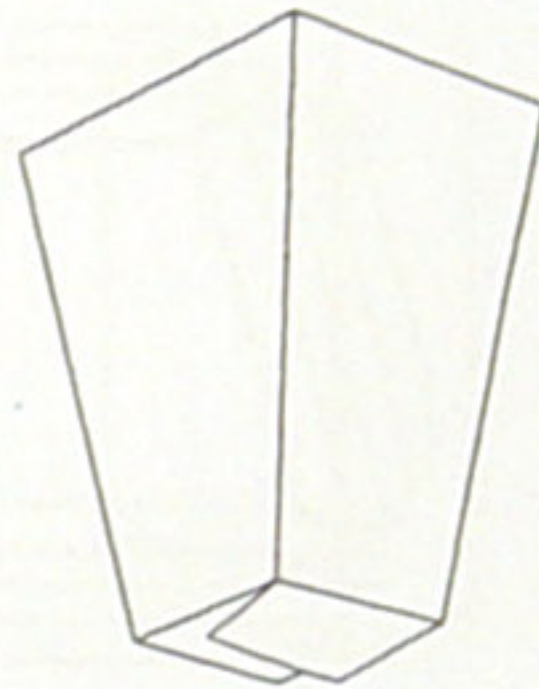
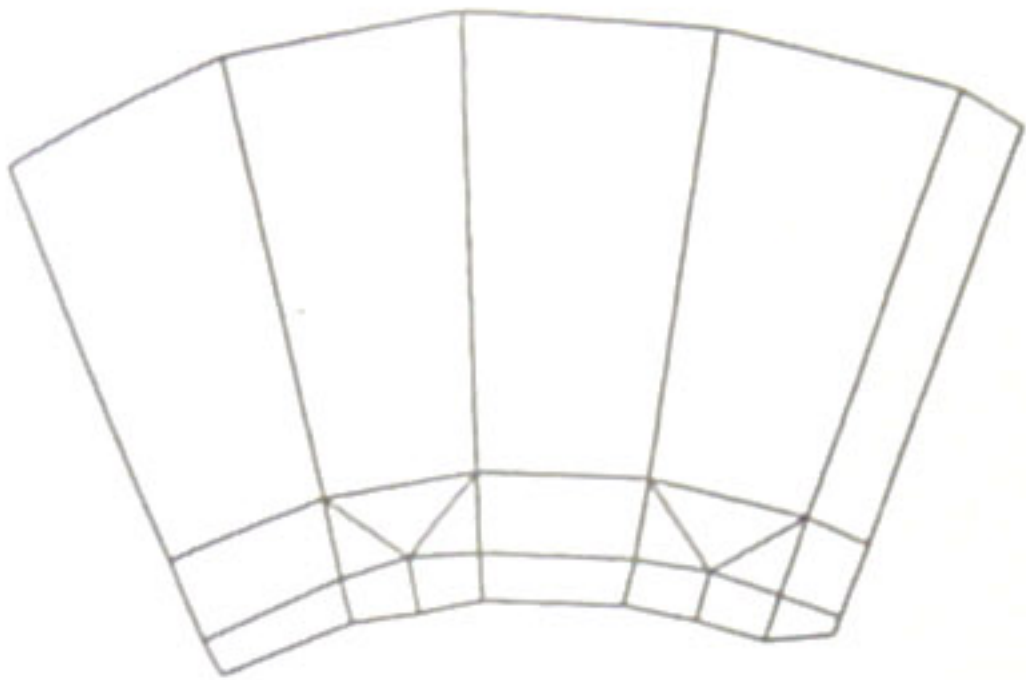




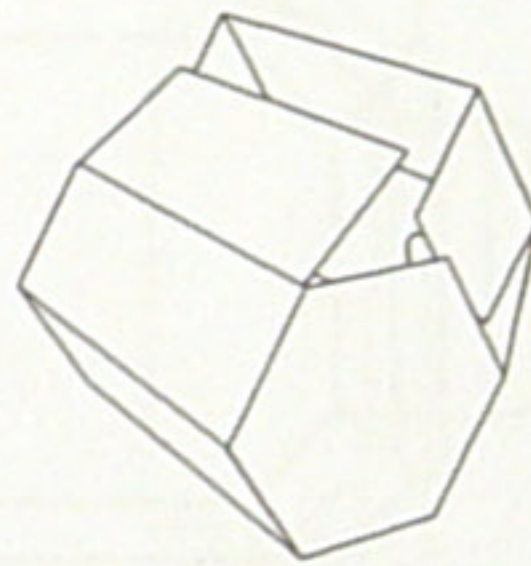
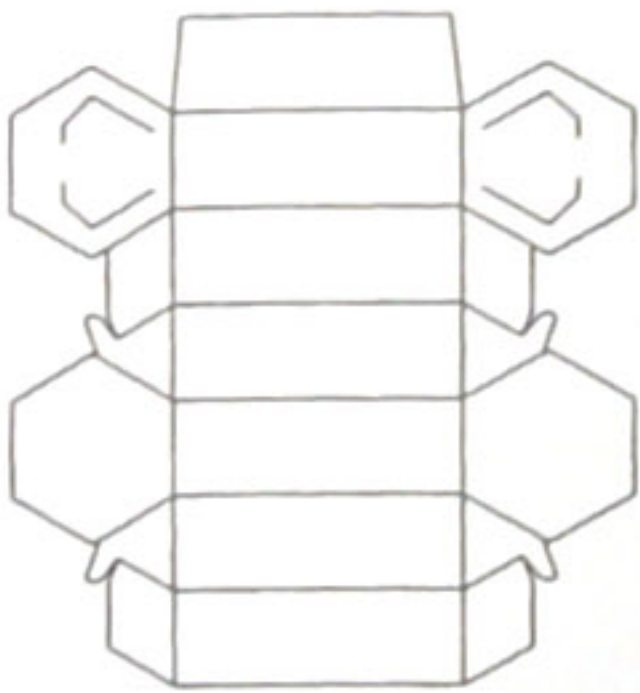
F 2053



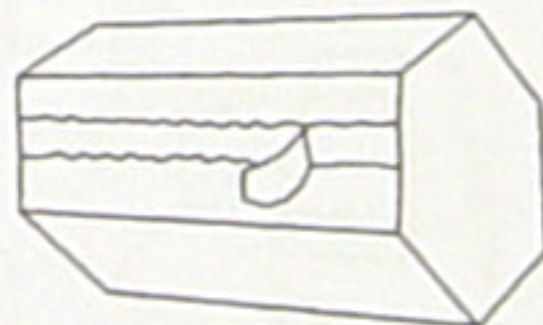
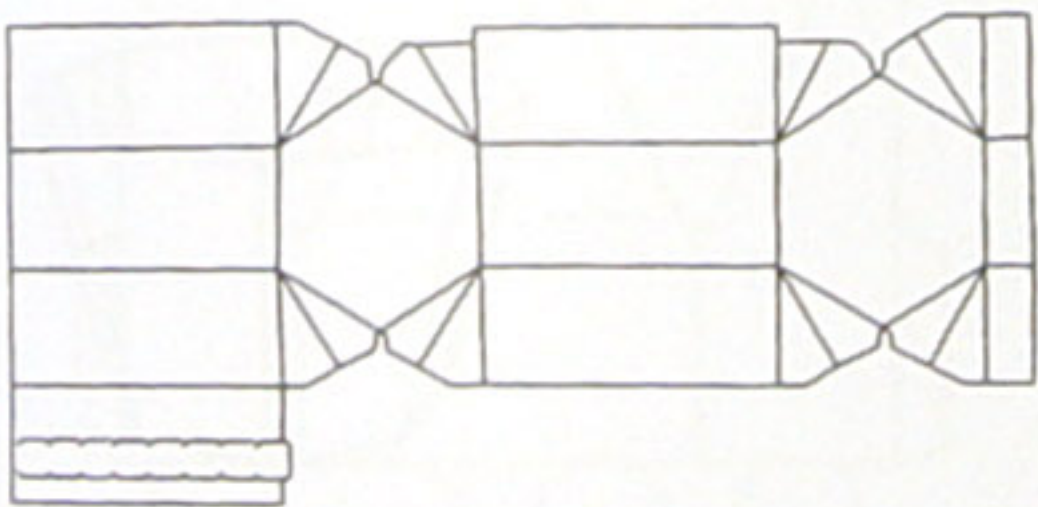
F 3001



F 3011

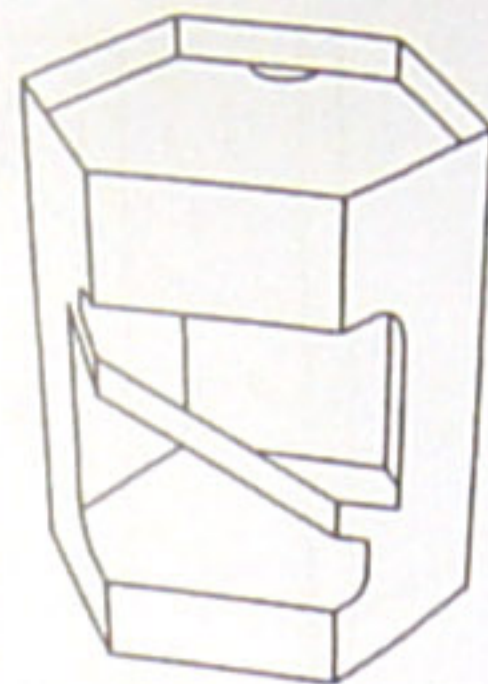
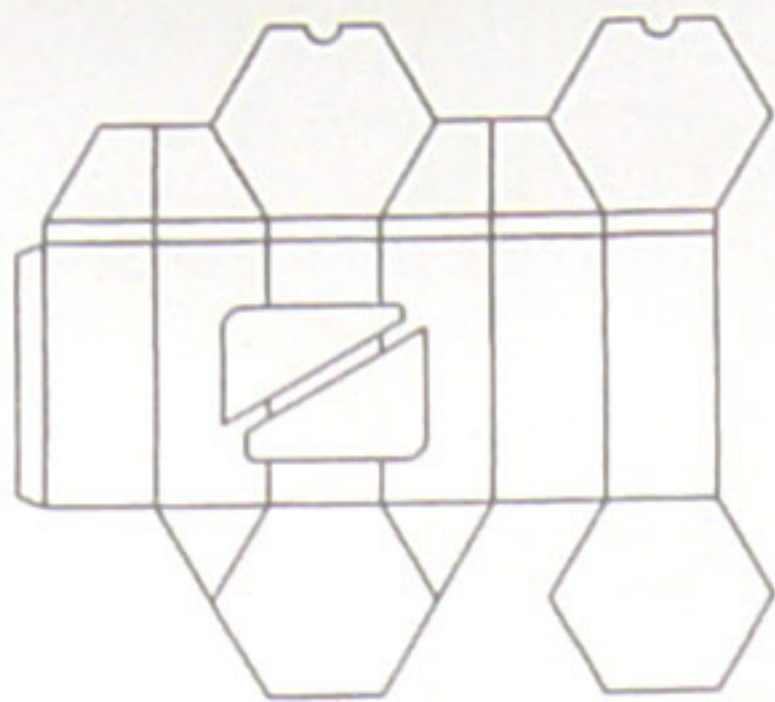


F 3021

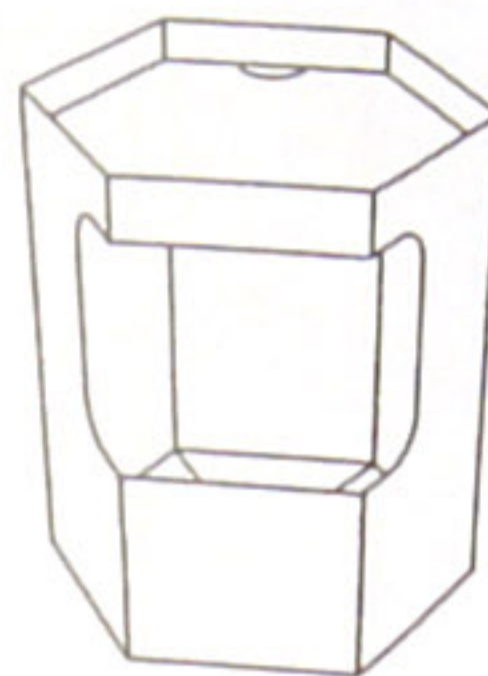
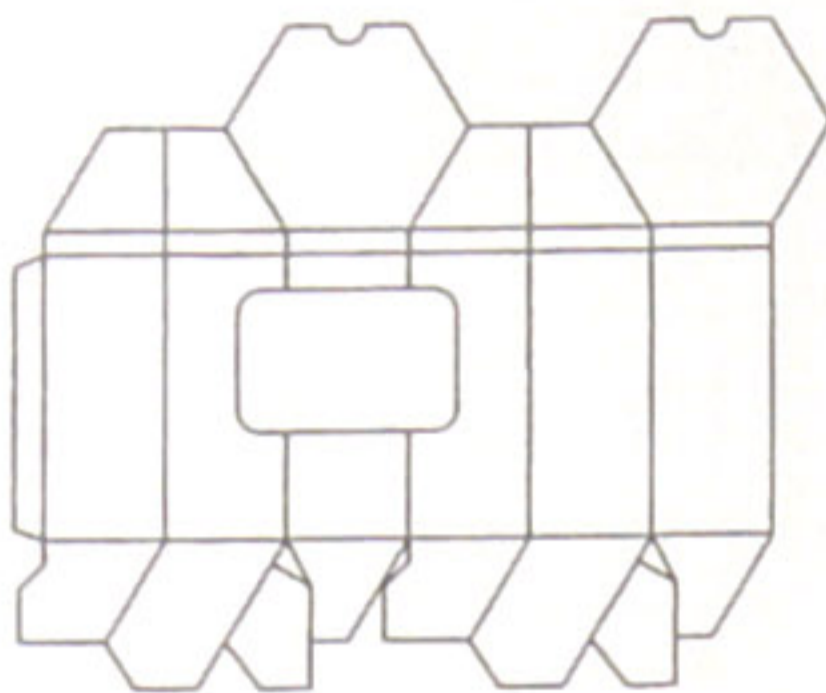


F 3022

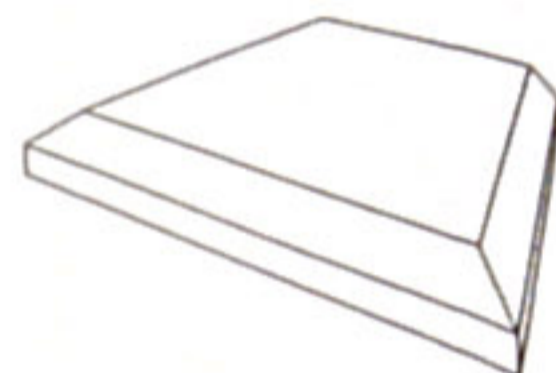
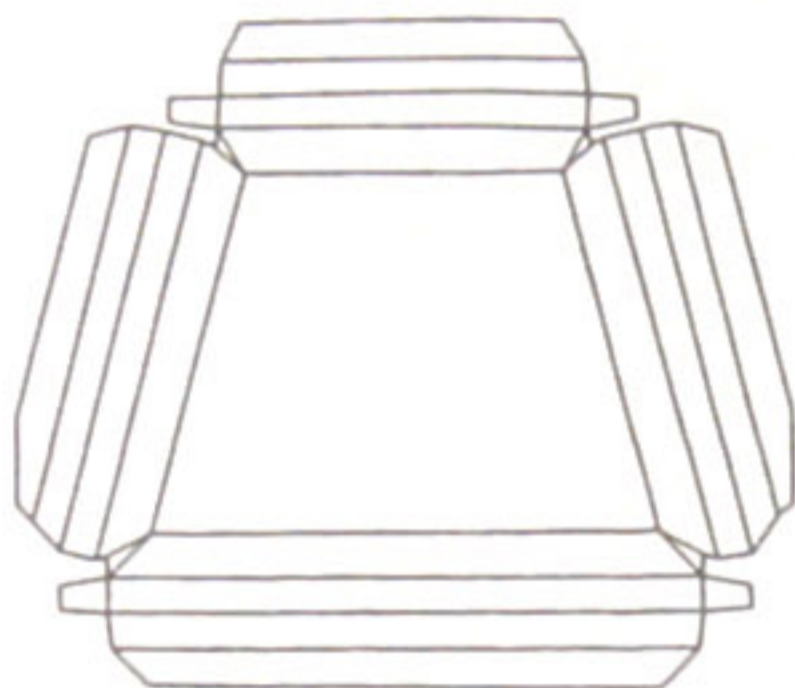
F 3051



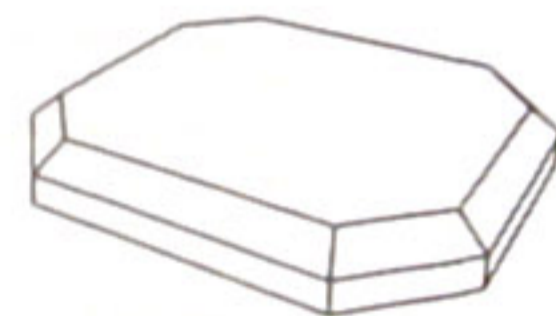
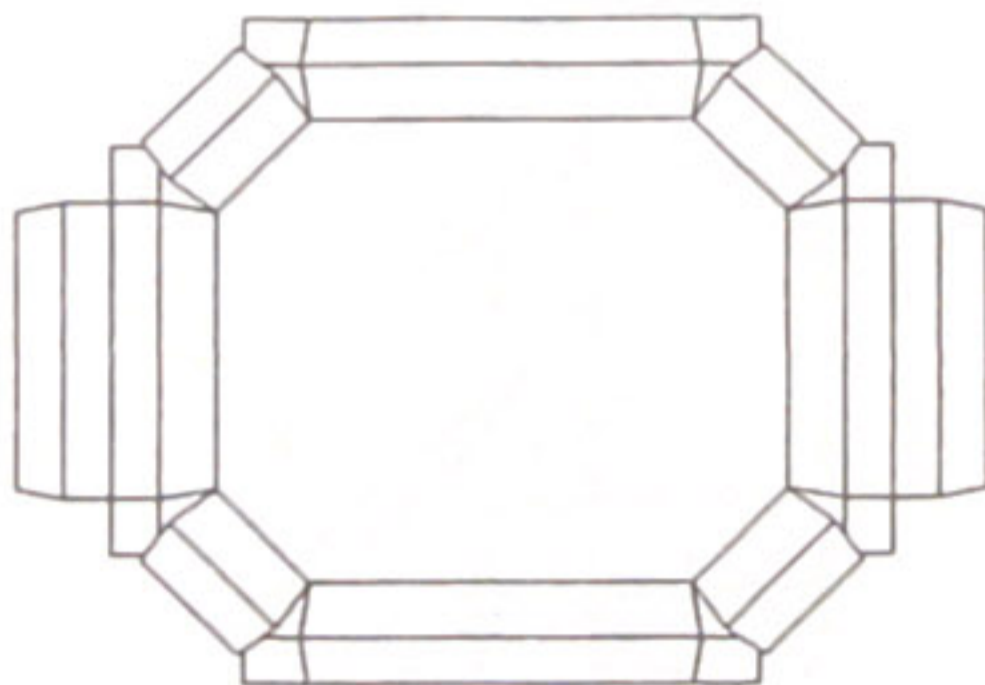
F 3052



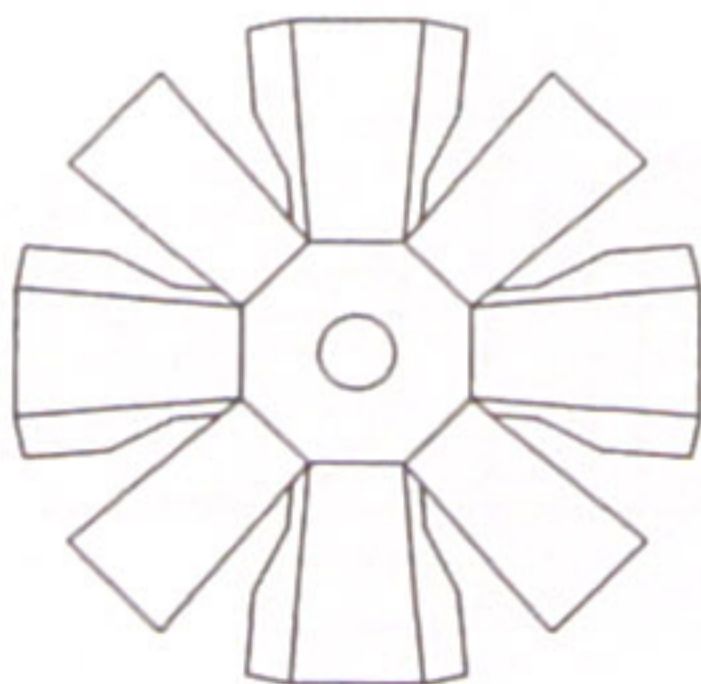
F 4011



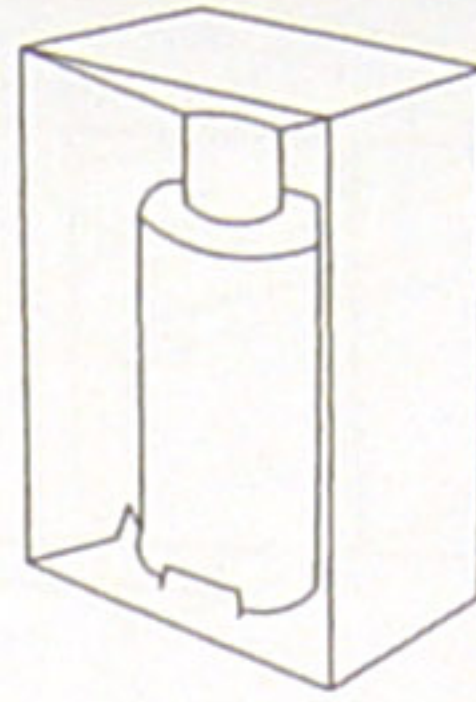
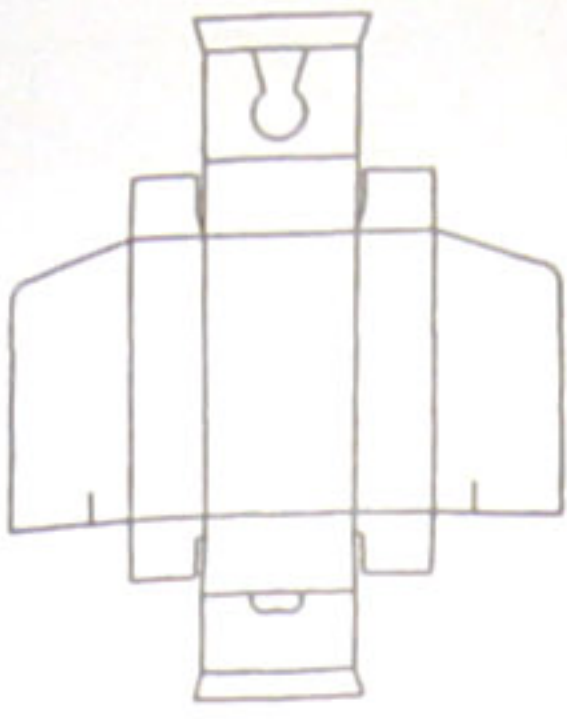
F 4012



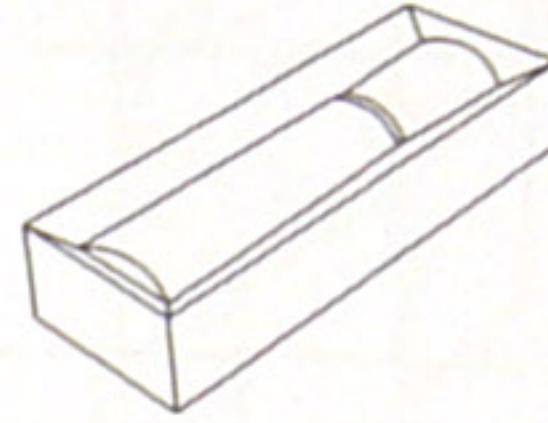
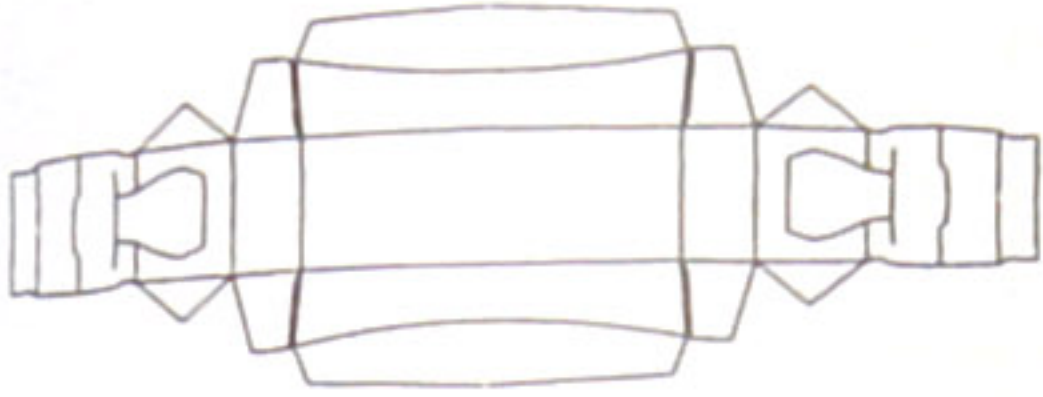
F 4061



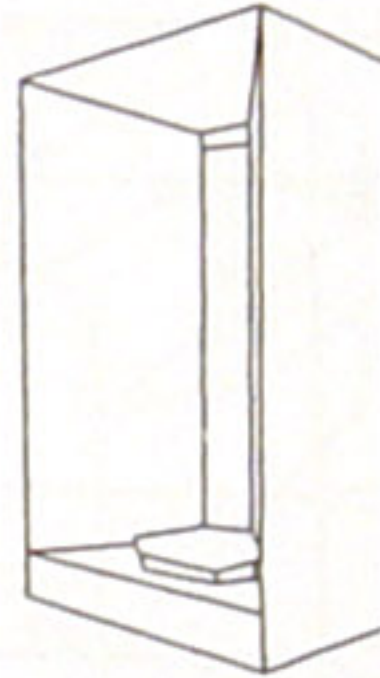
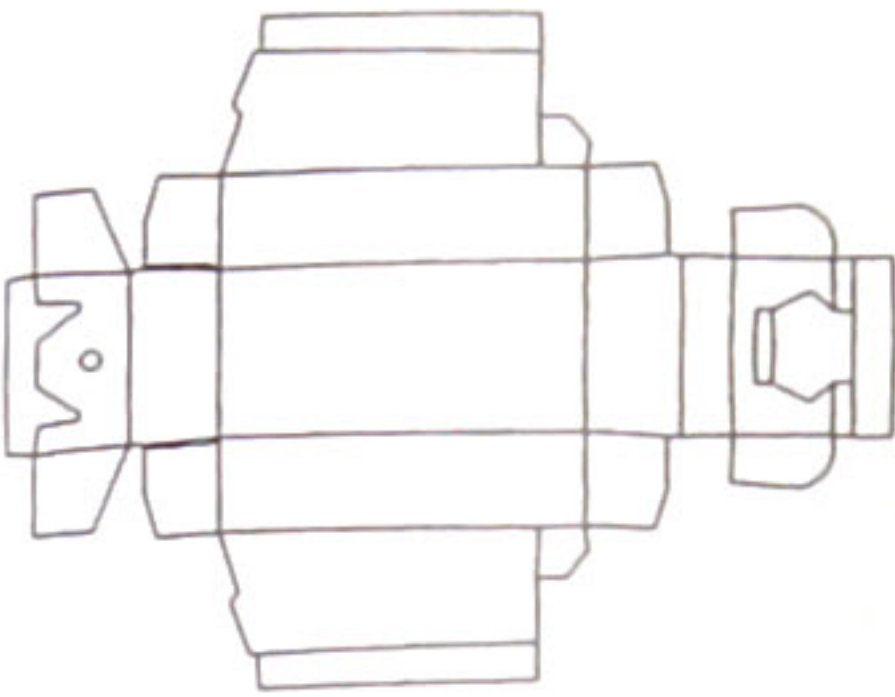




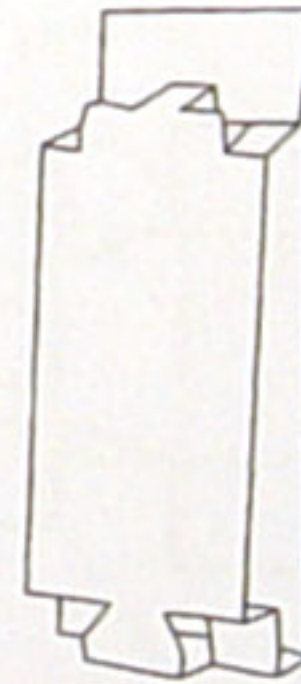
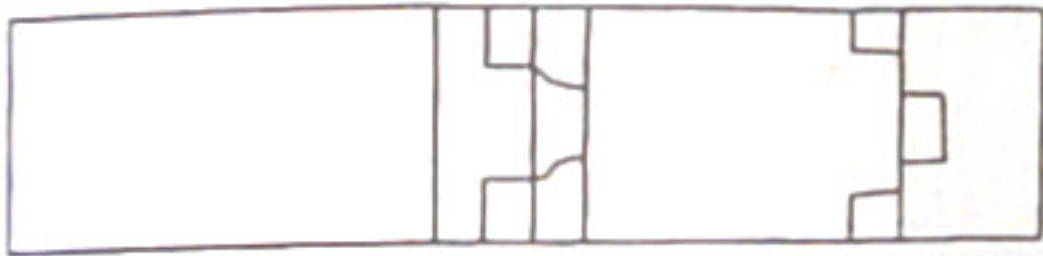
F 5001



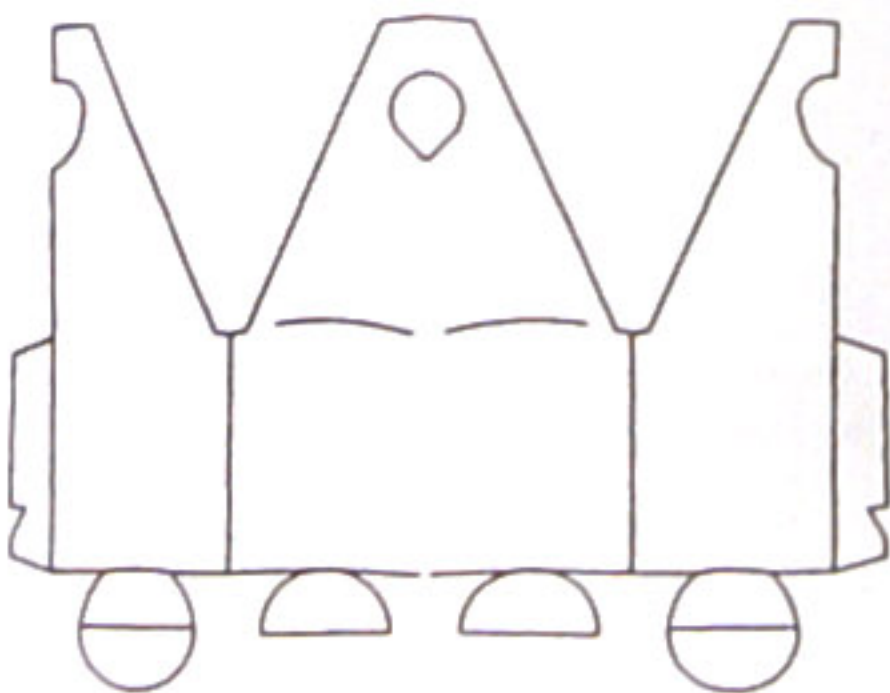
F 5002



F 5003

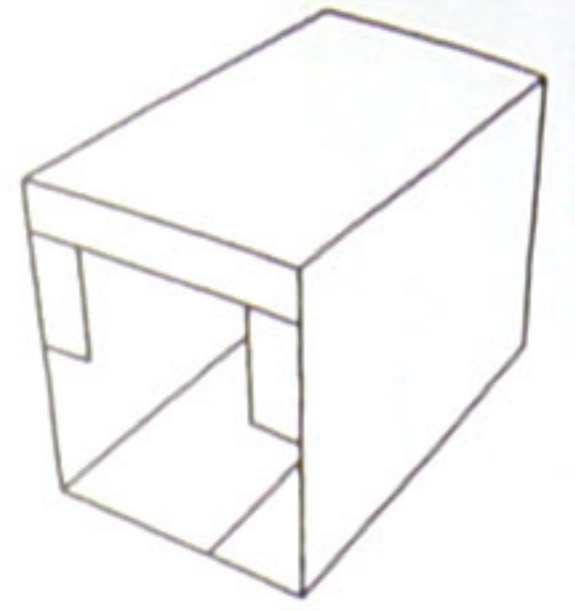
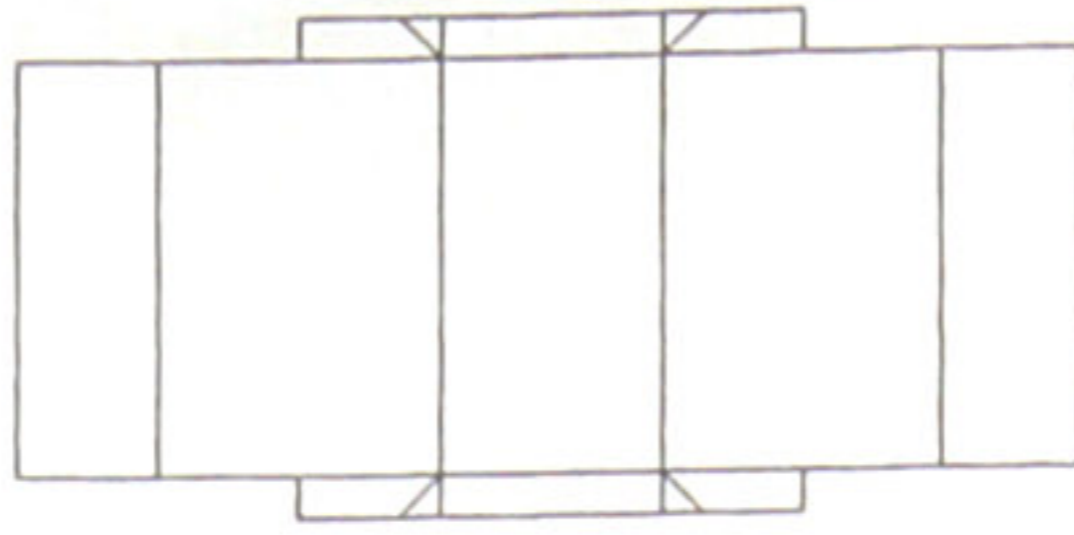


F 5004

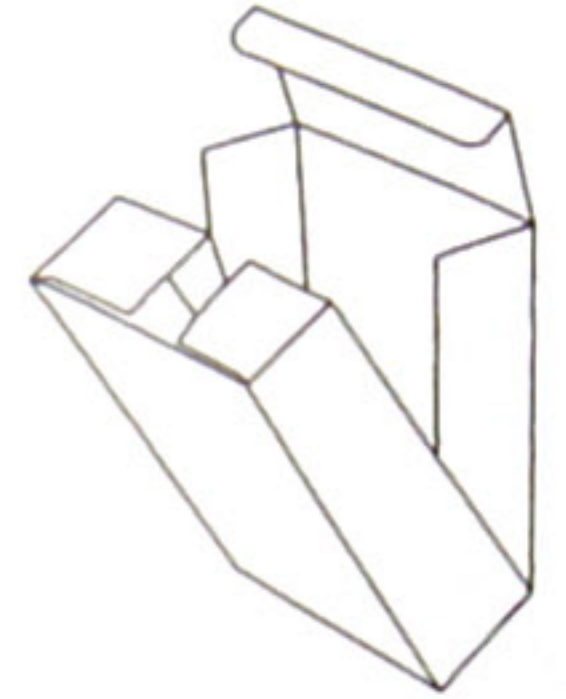
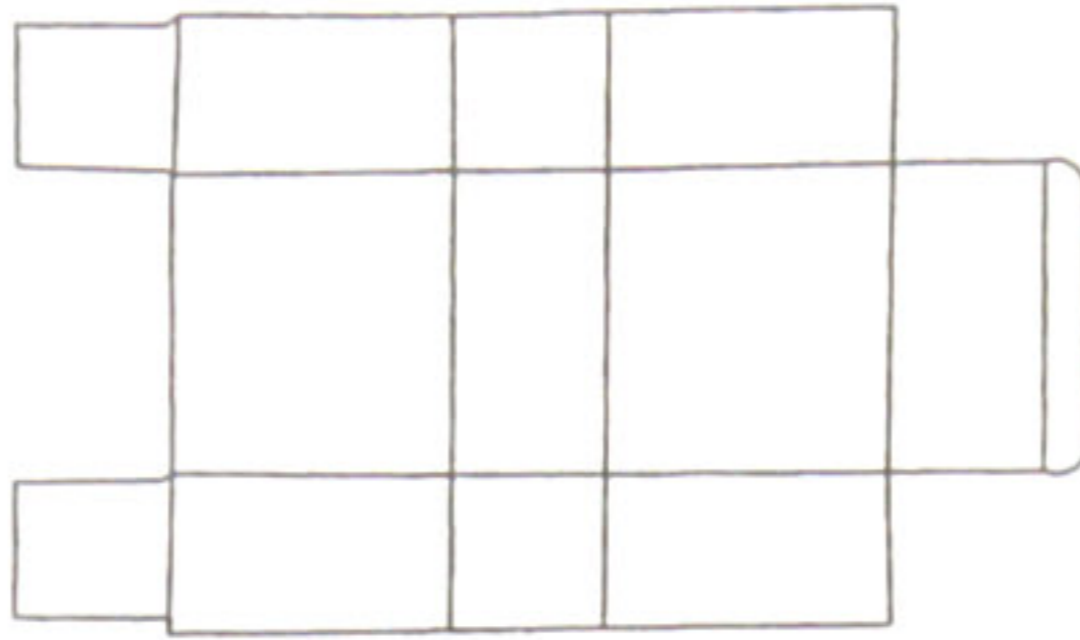


F 5011

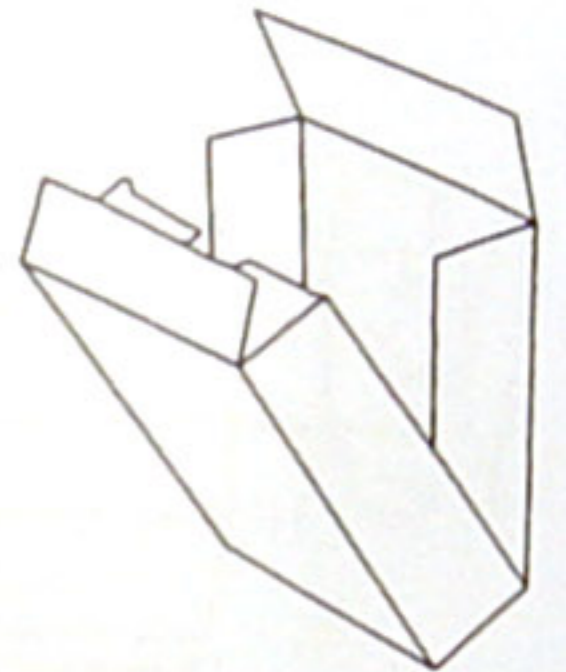
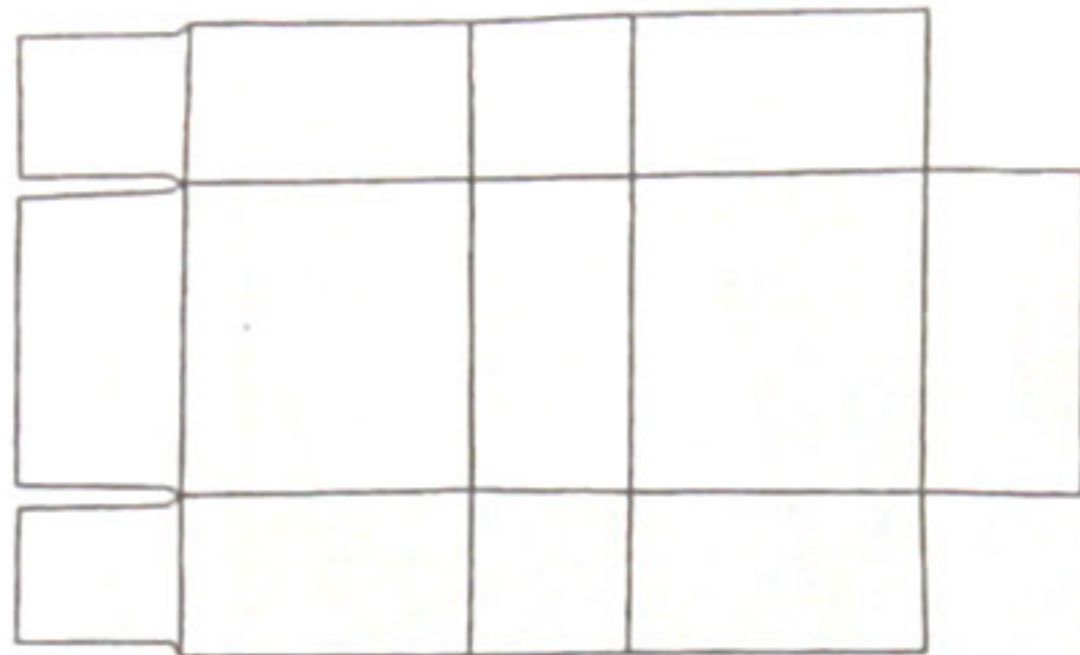
F 5021



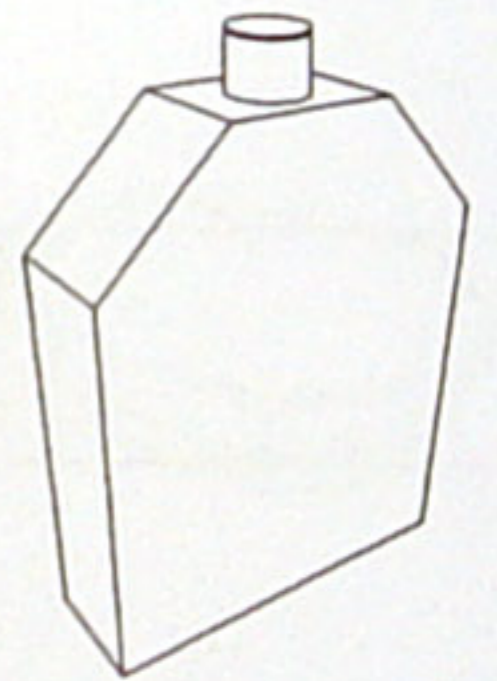
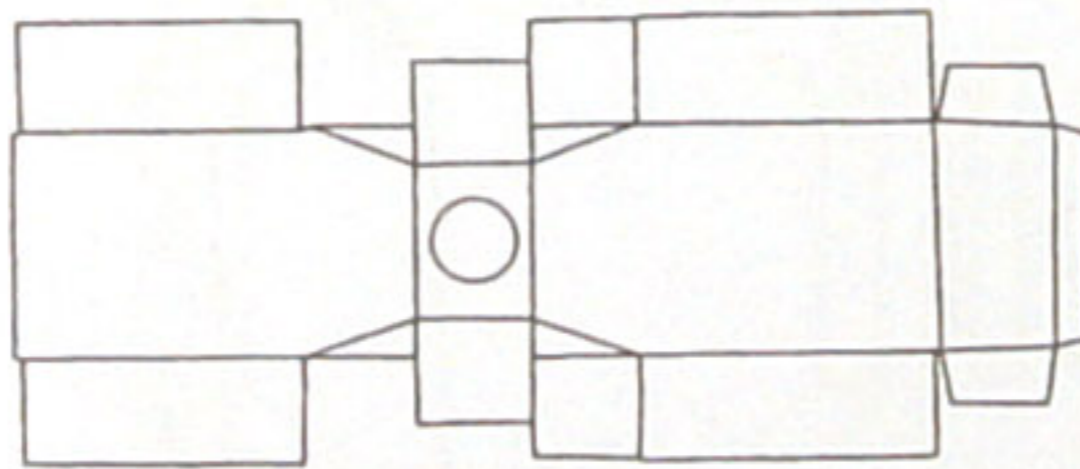
F 6001



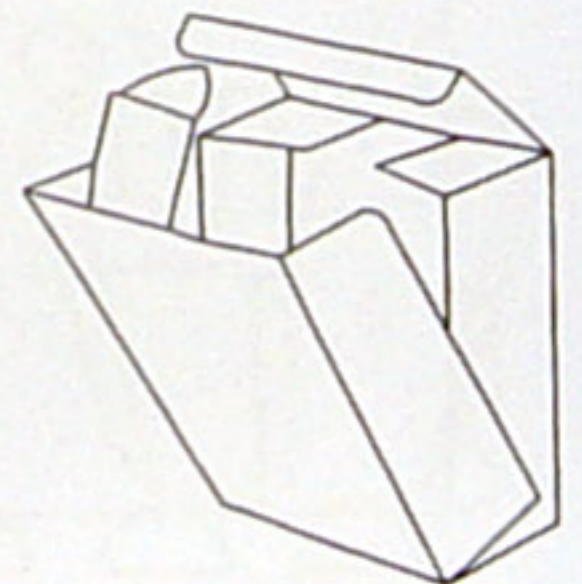
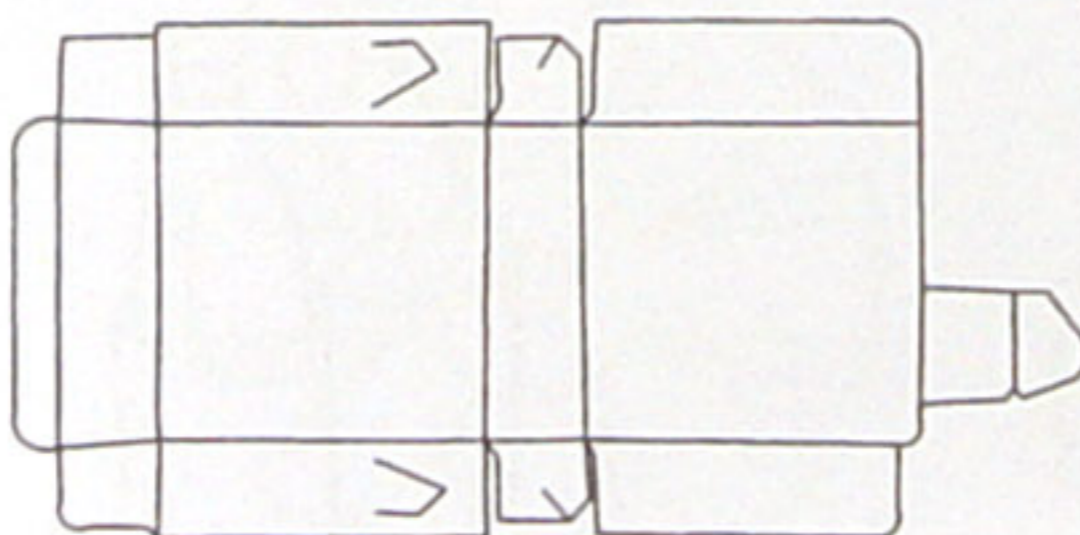
F 6002

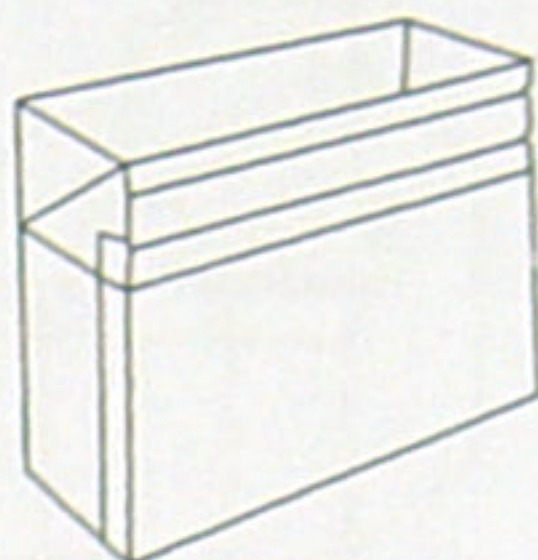
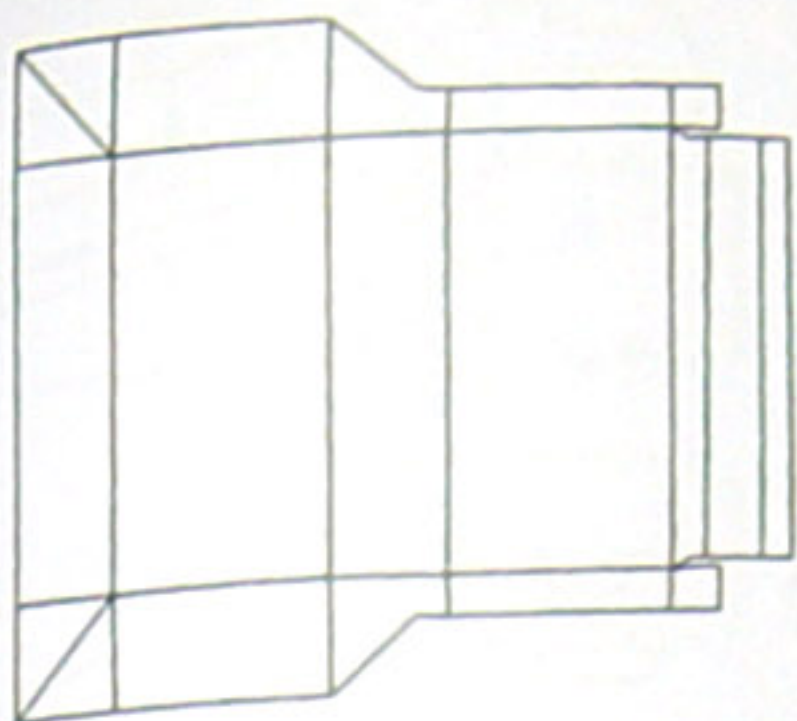


F 6003

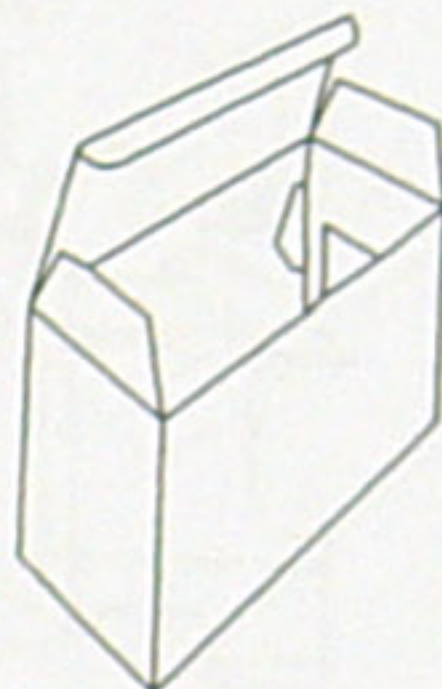
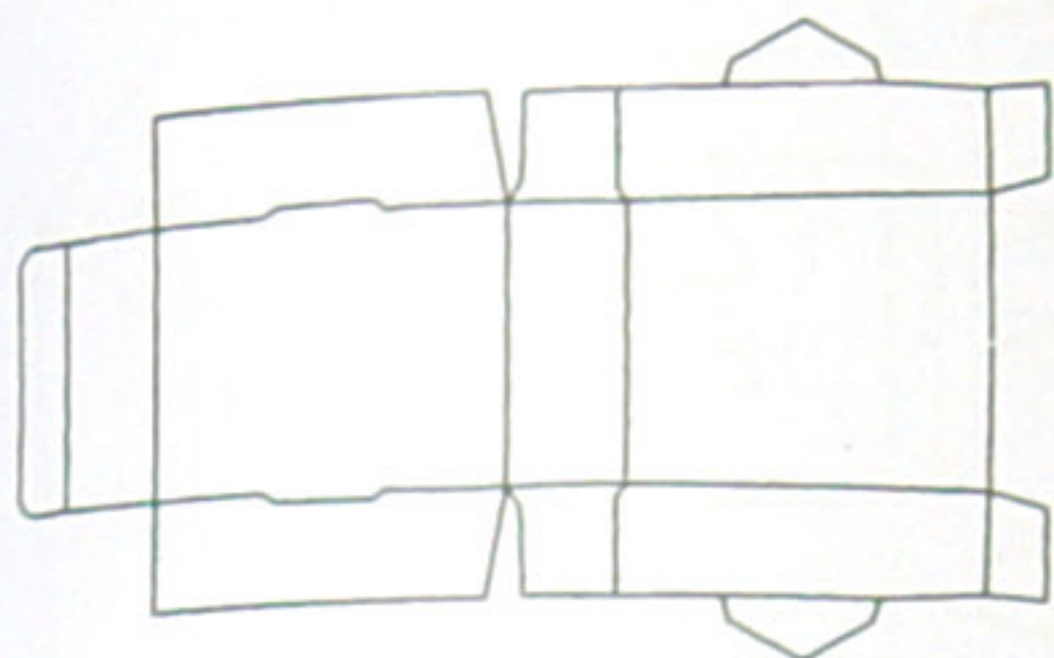


F 6004

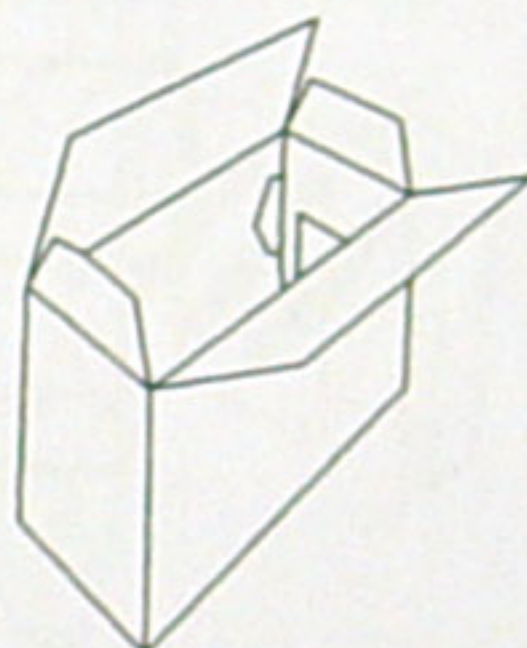
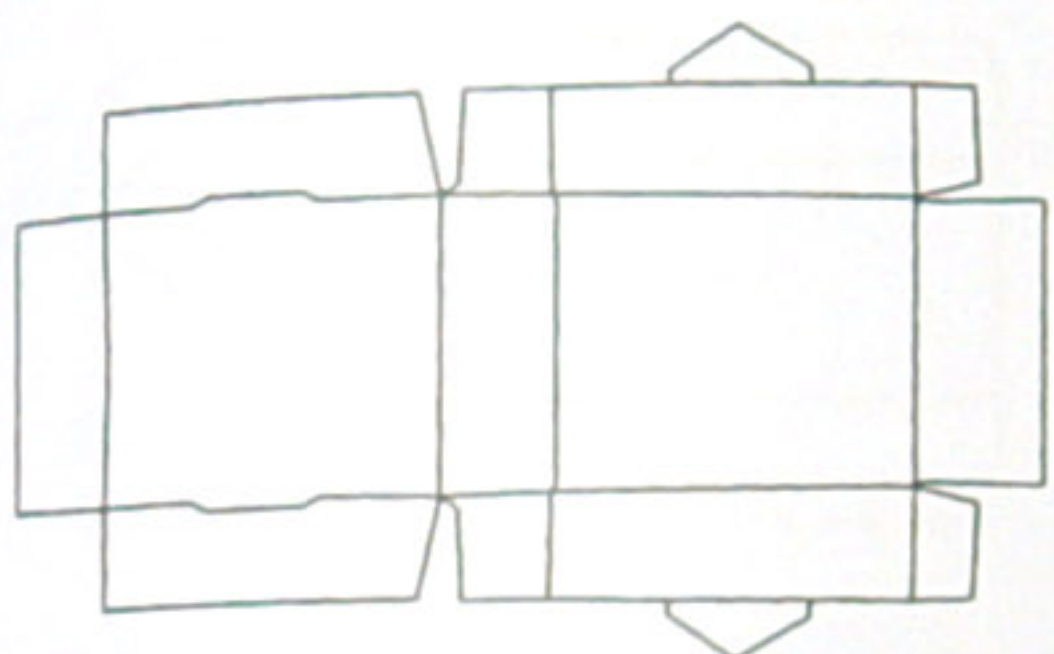




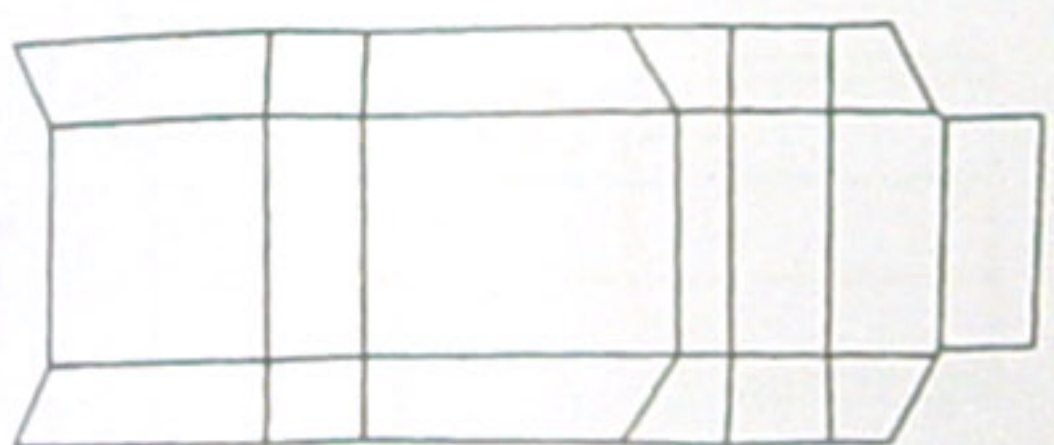
F 6005



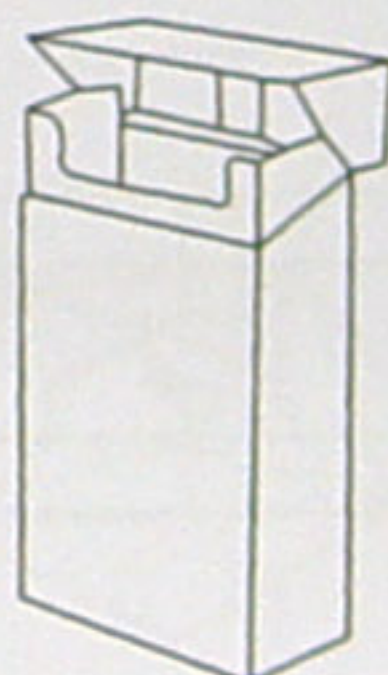
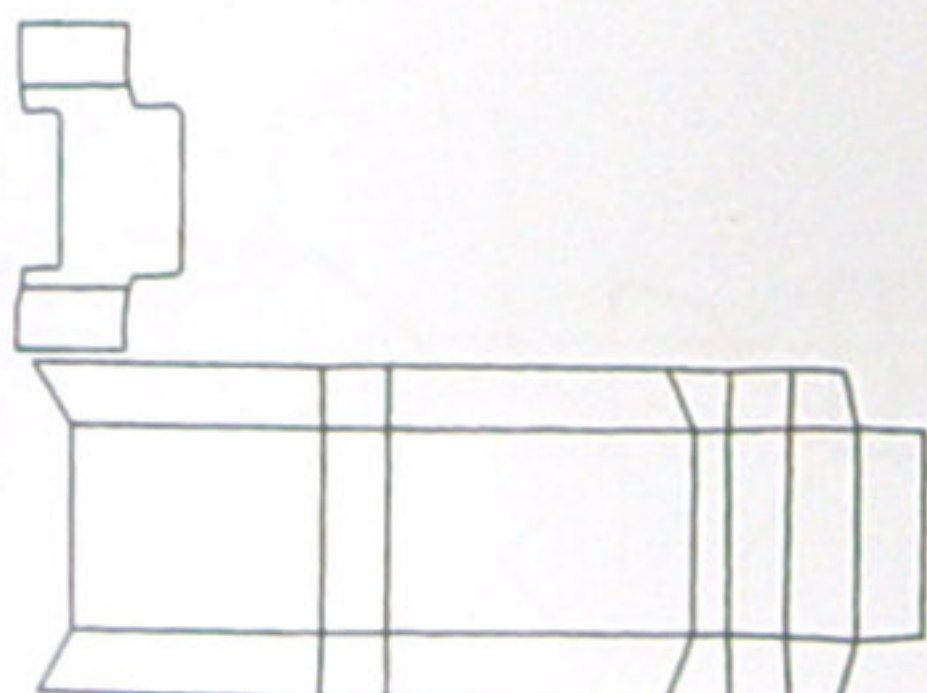
F 6006



F 6007

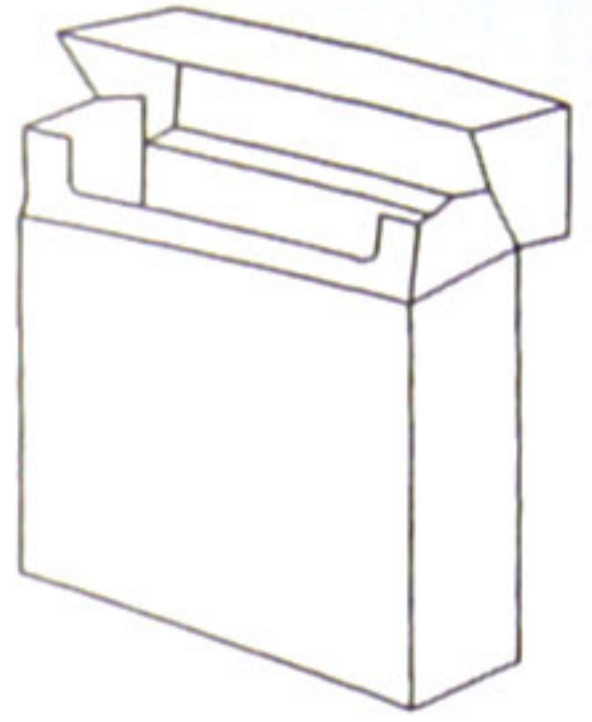
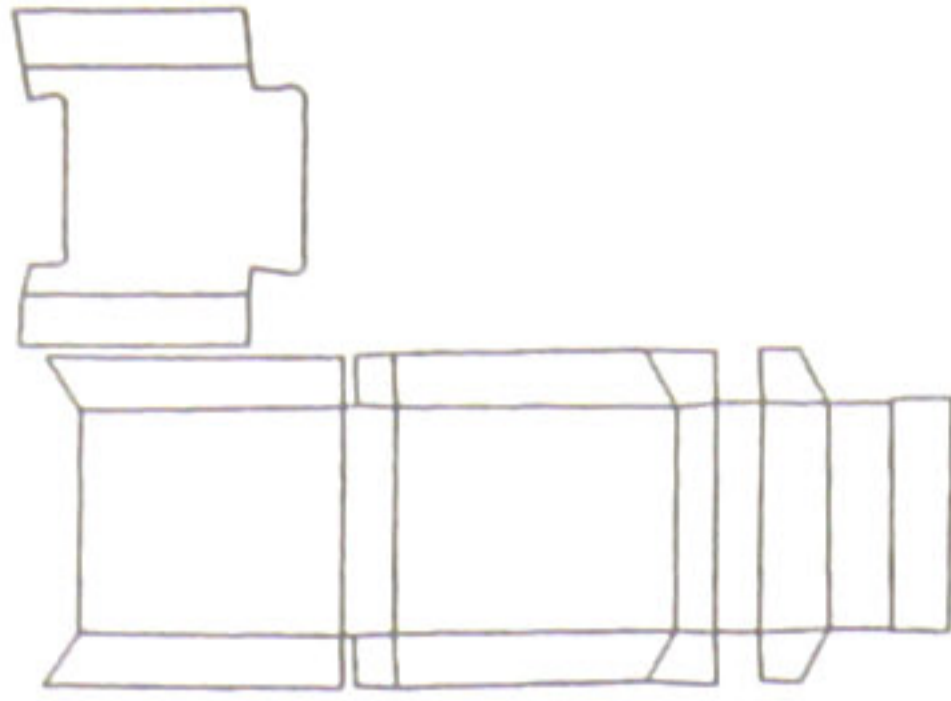


F 6011

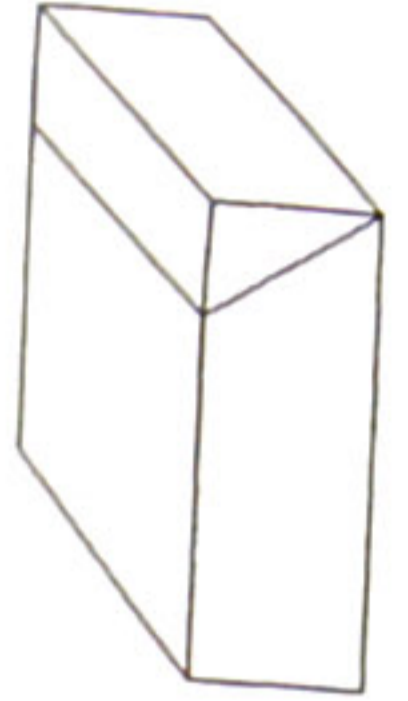
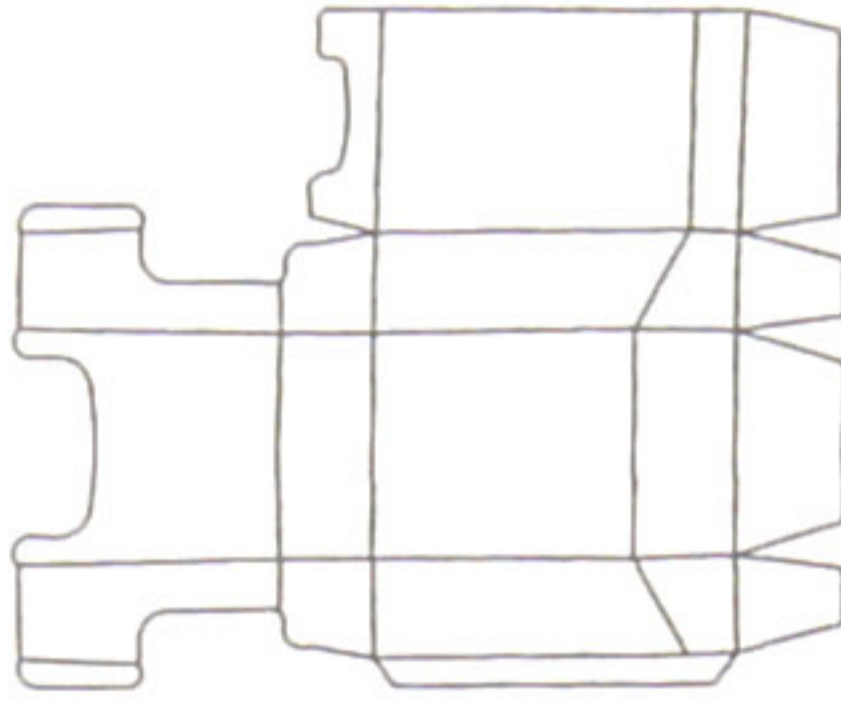


F 6012

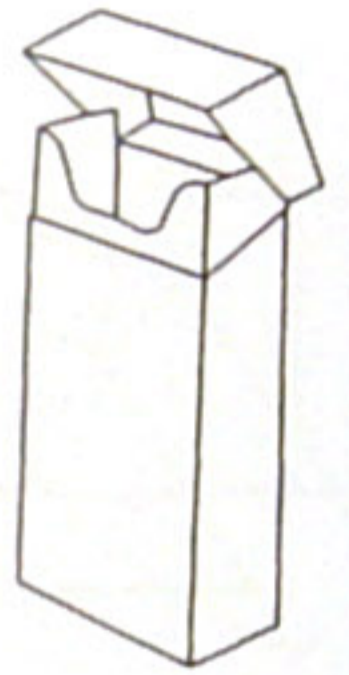
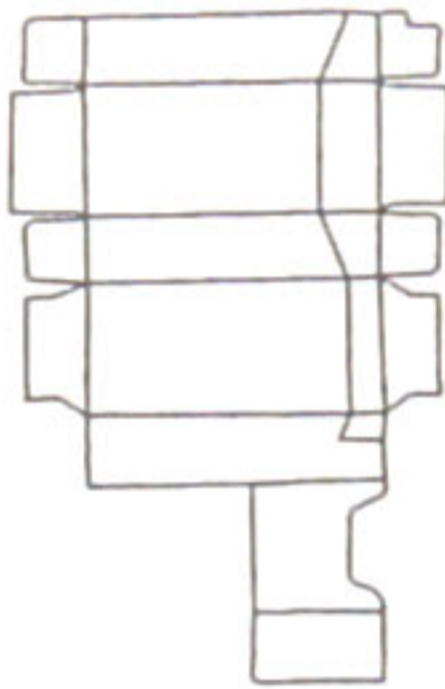
F 6013



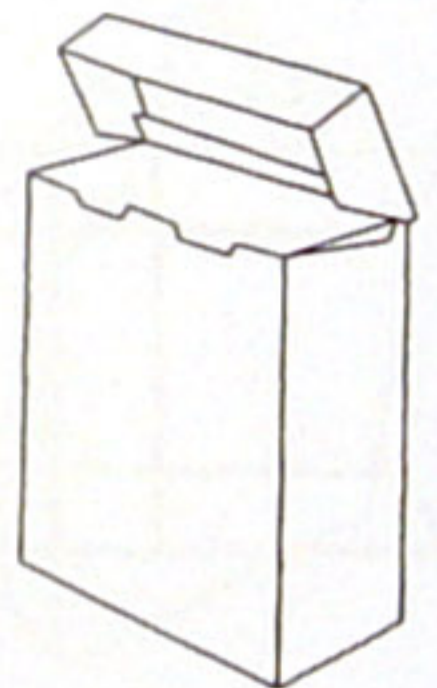
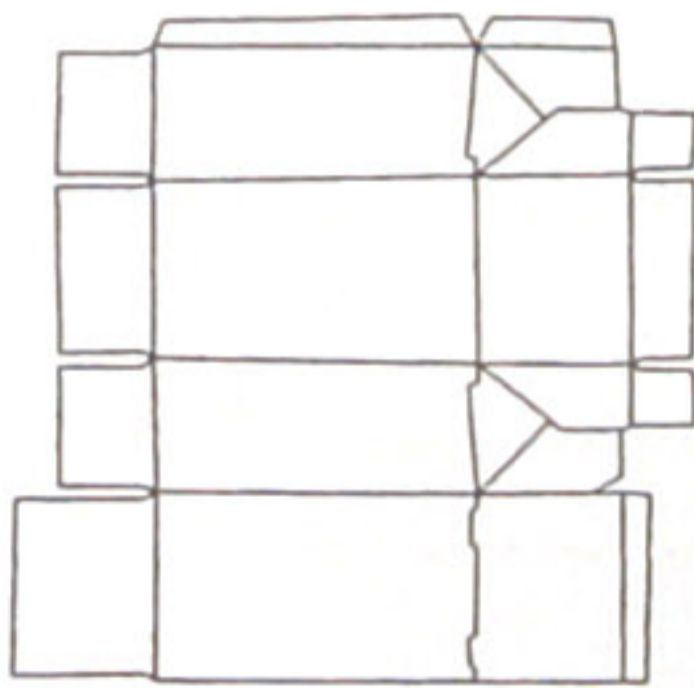
F 6014



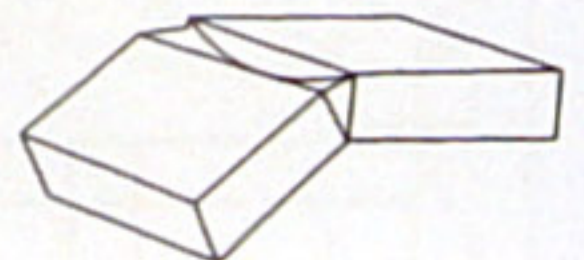
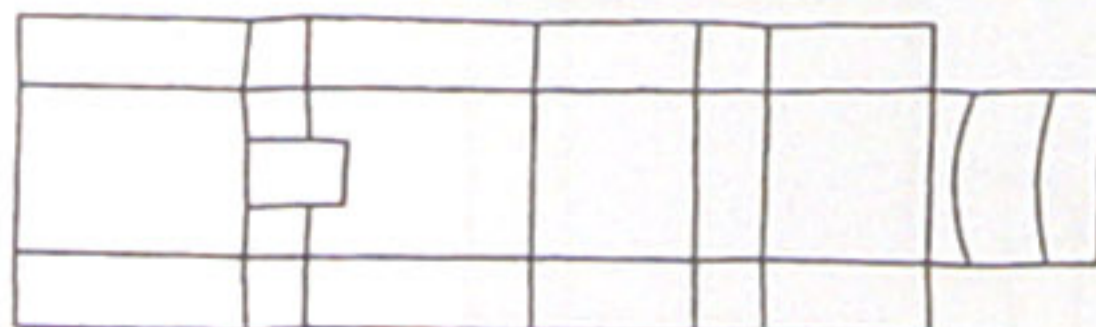
F 6015

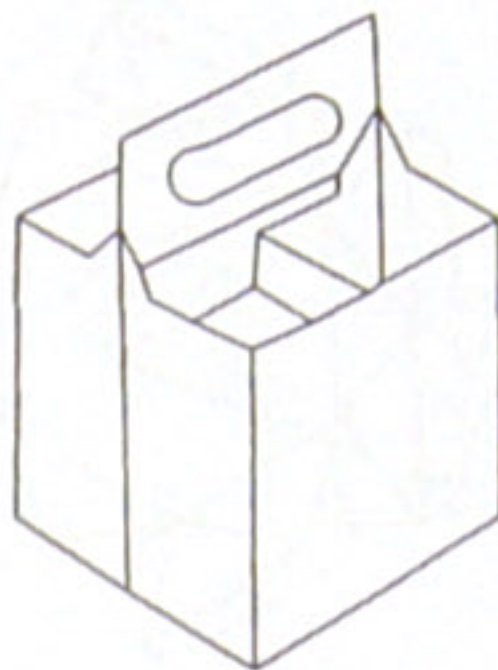
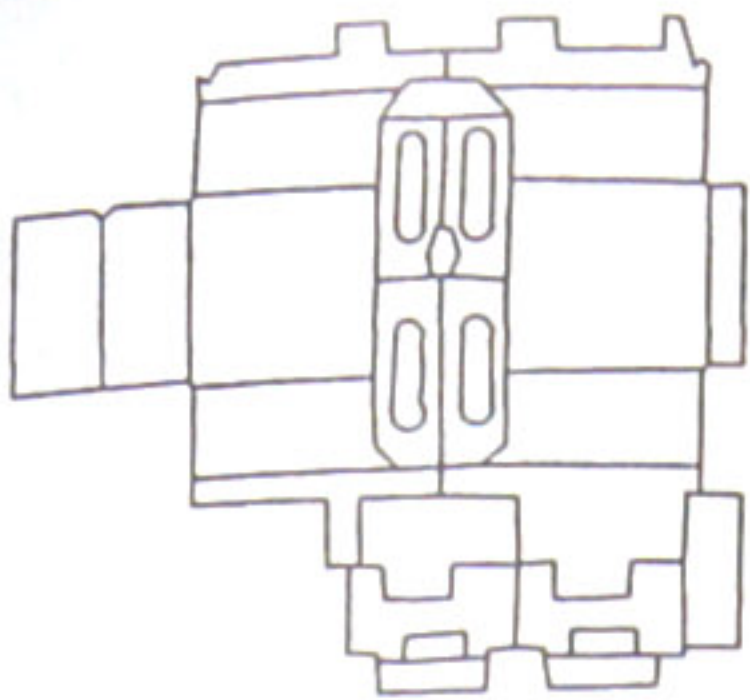


F 6016

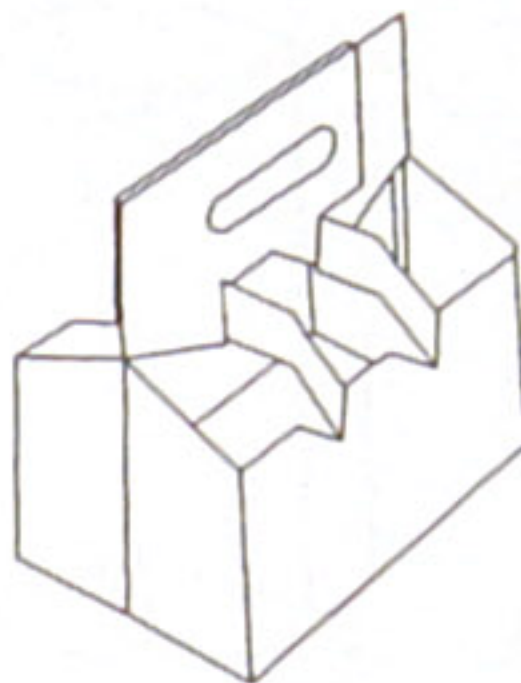
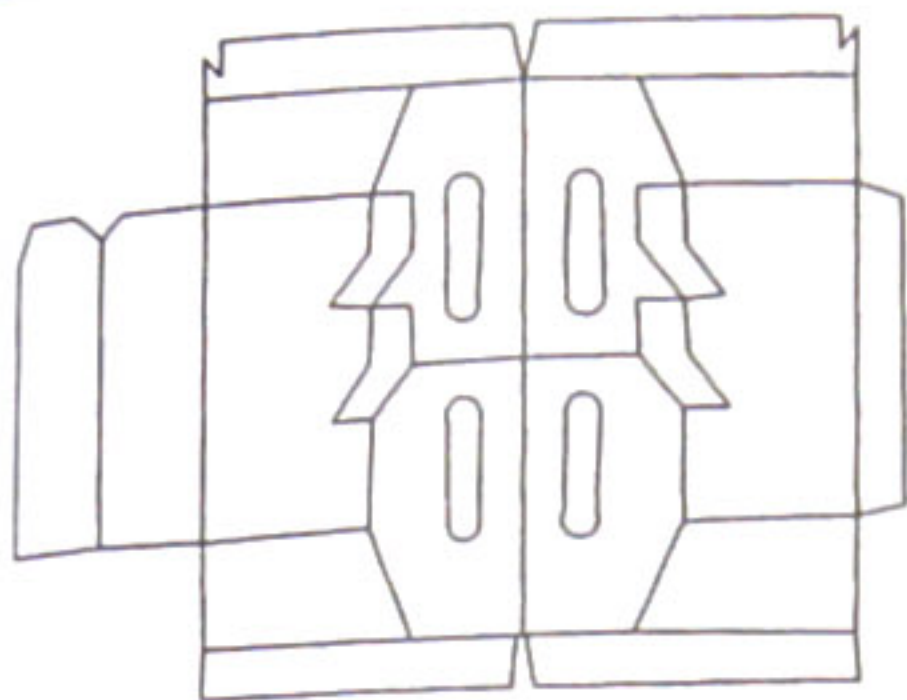


F 6021

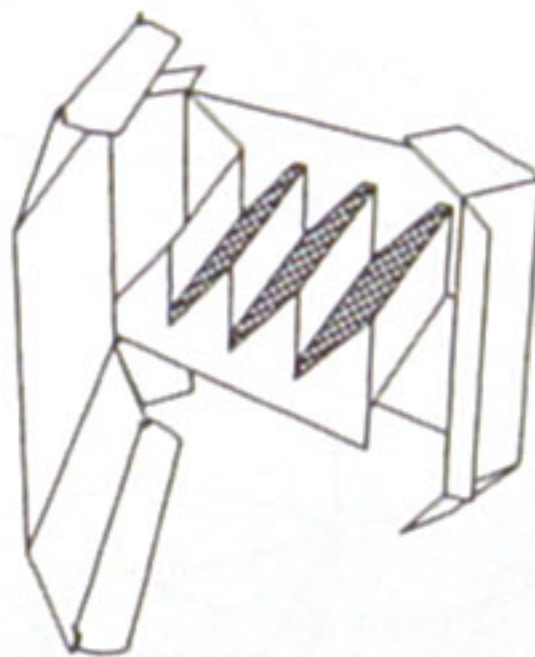
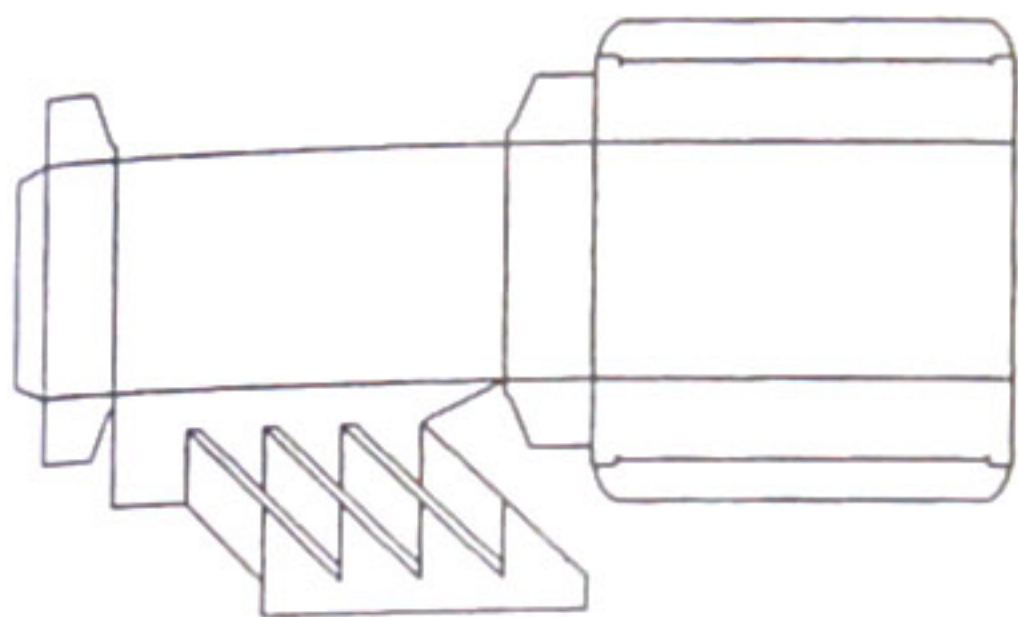




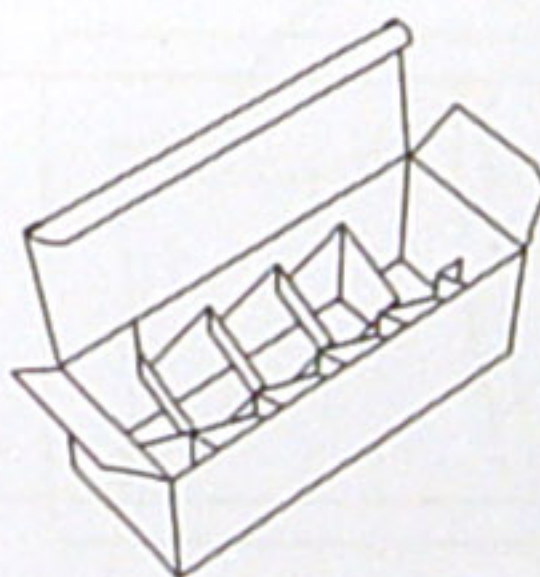
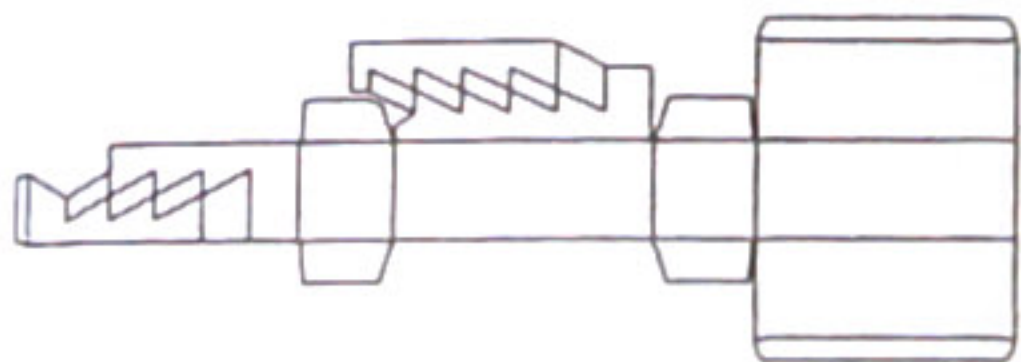
F 6031



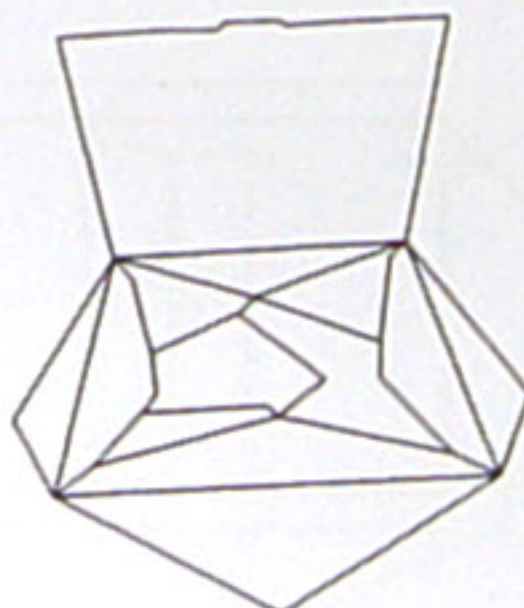
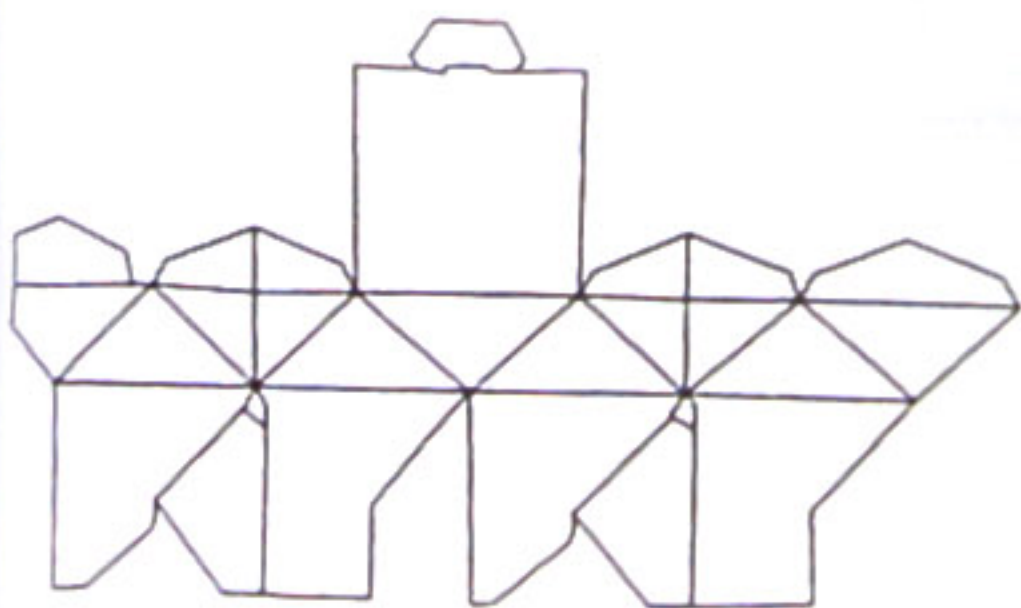
F 6032



F 6041

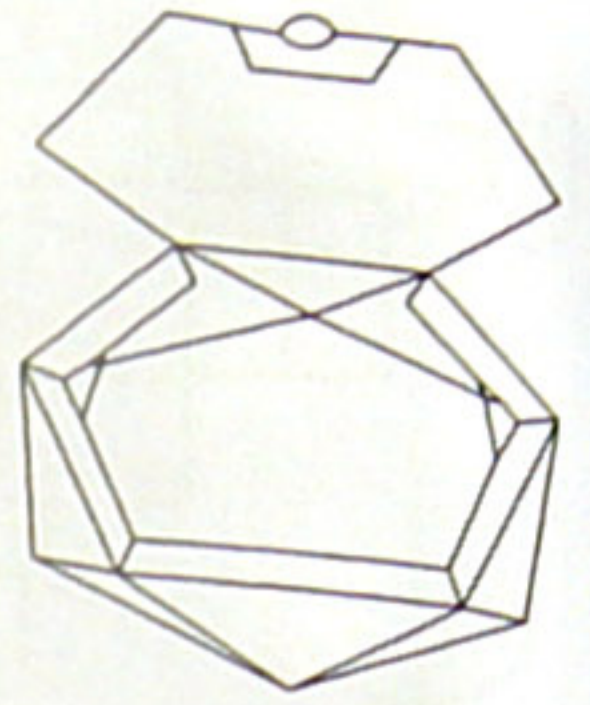
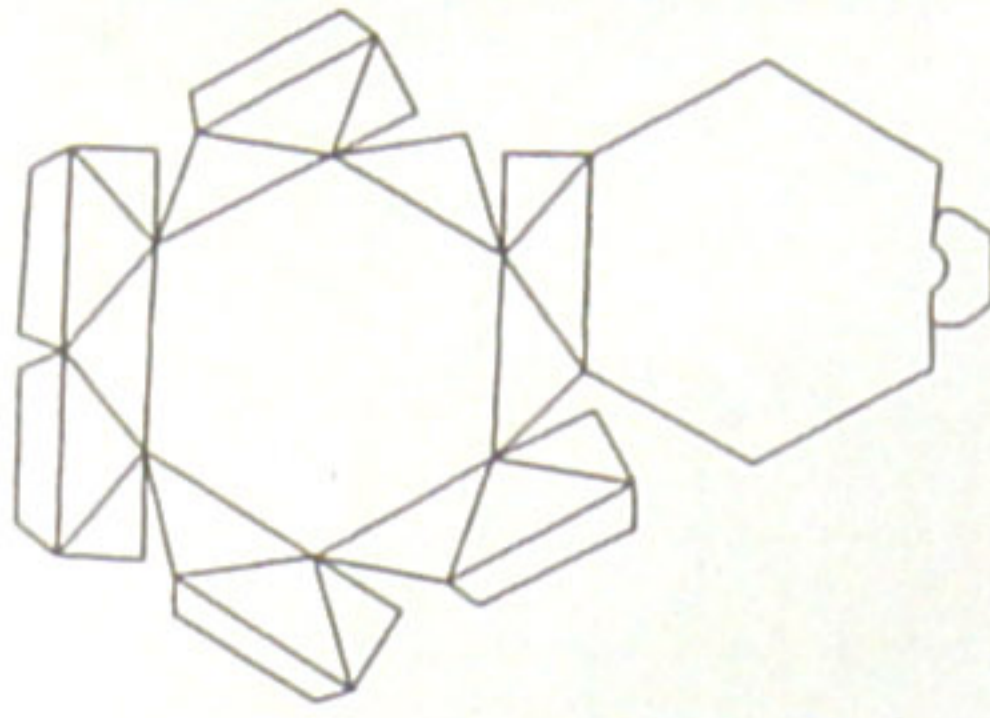


F 6042

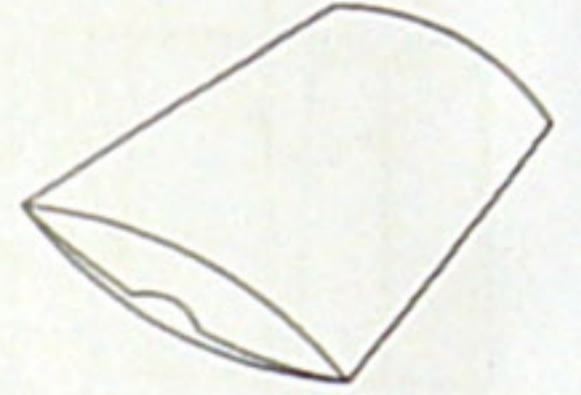
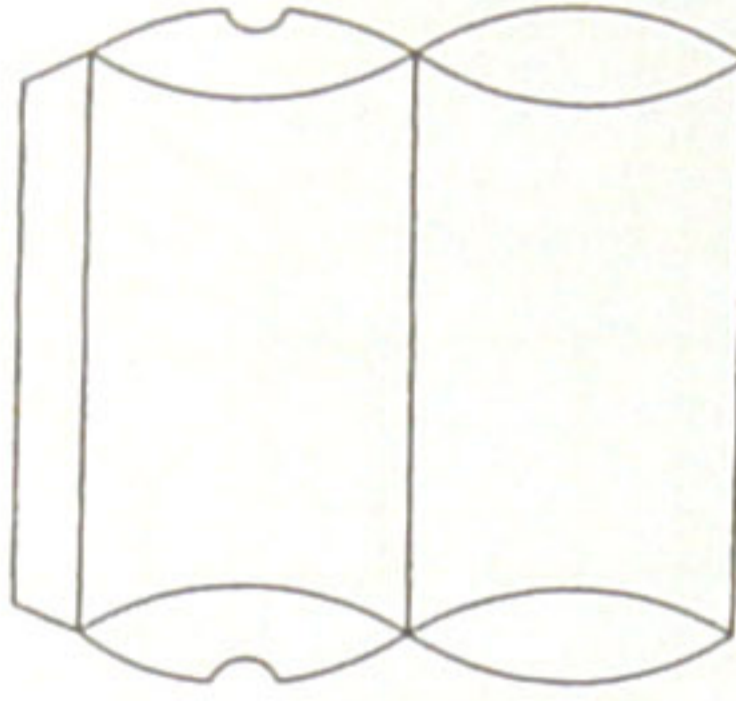


F 6081

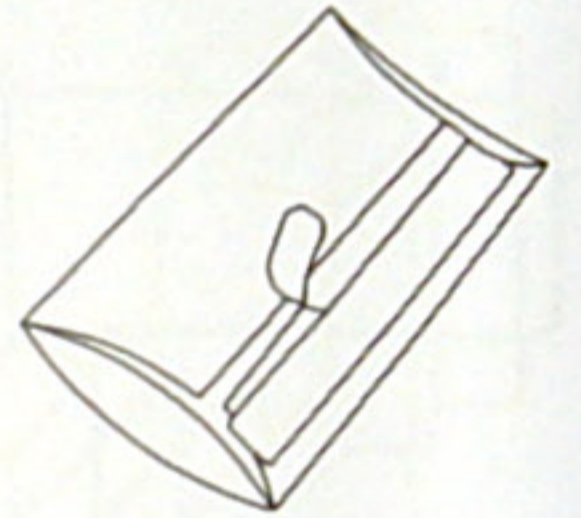
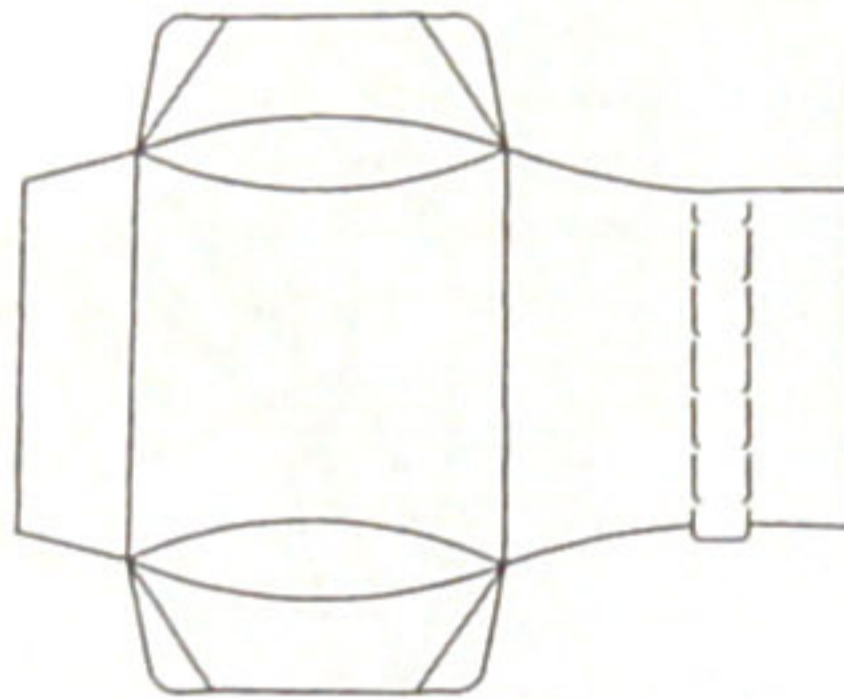
F 6082



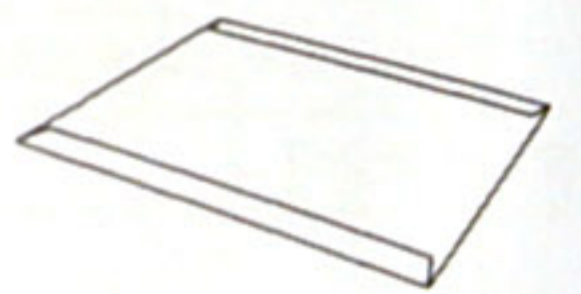
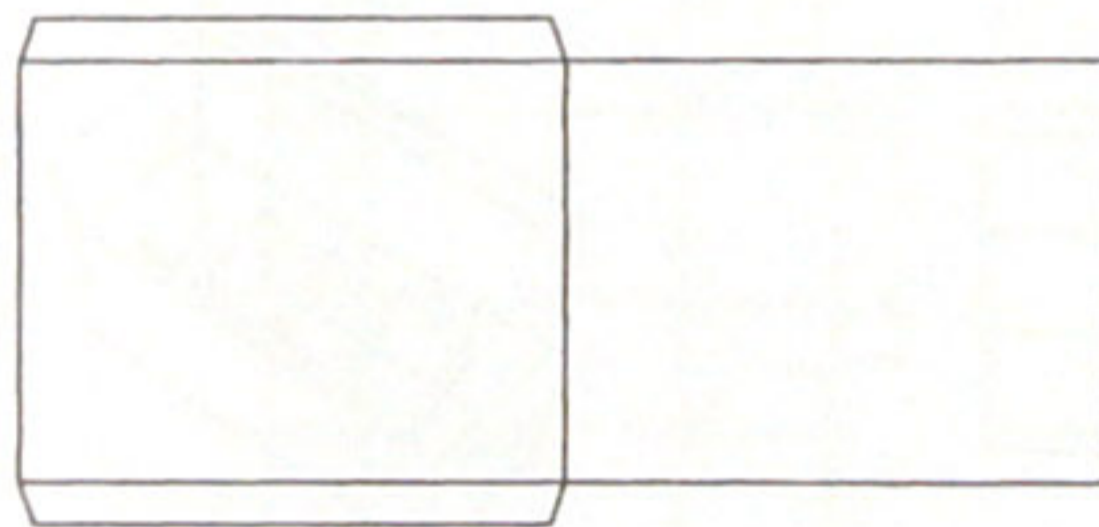
F 7001



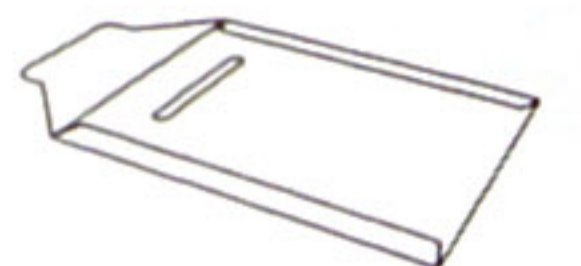
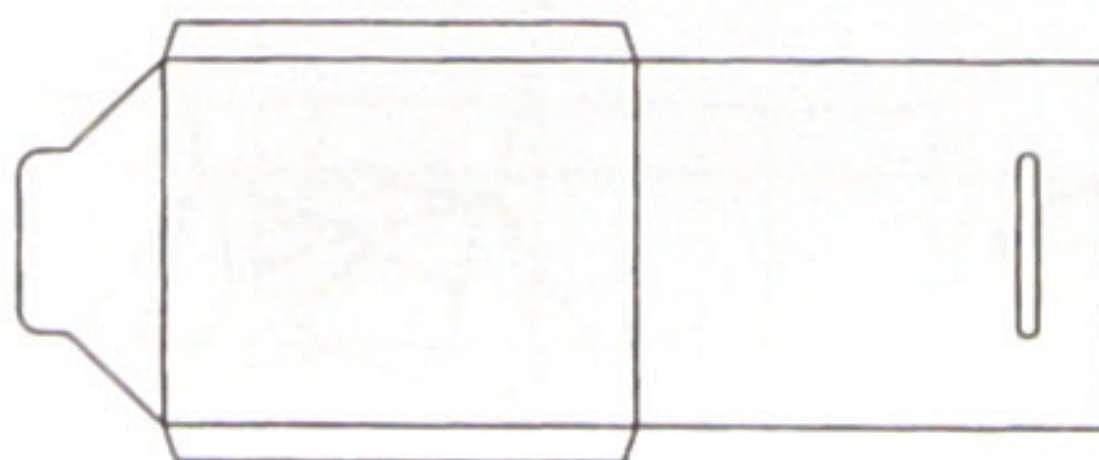
F 7002

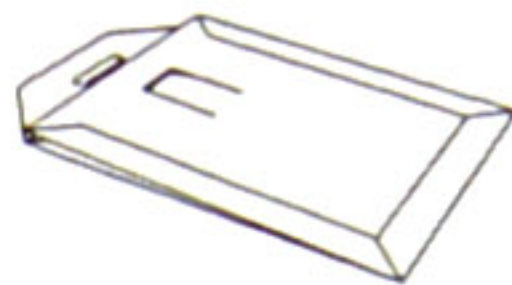
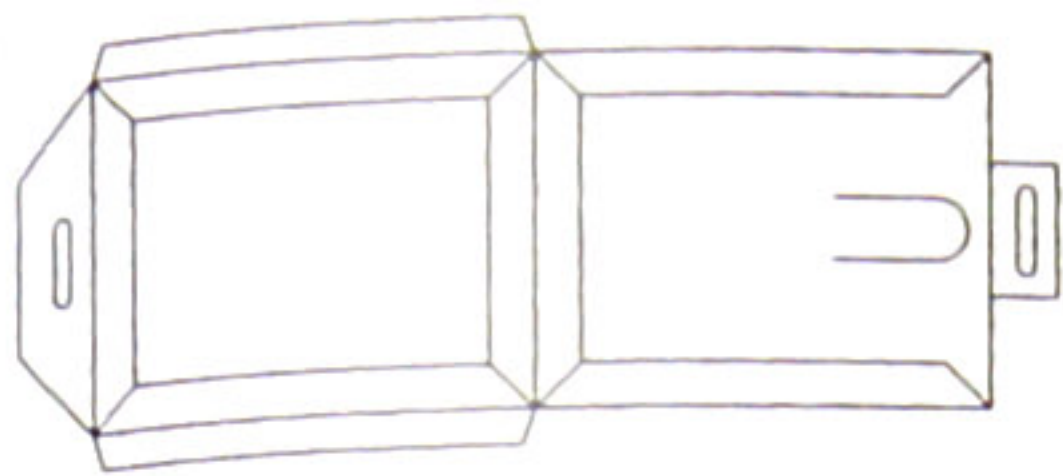


F 7011

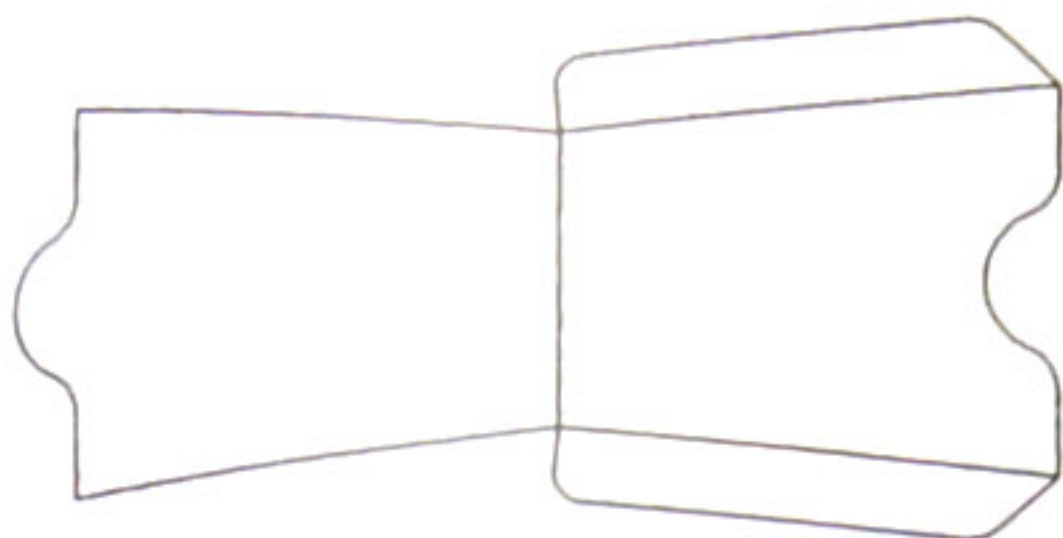


F 7012

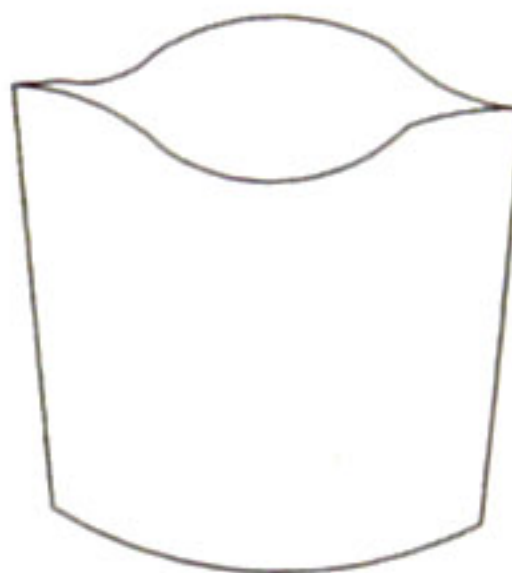
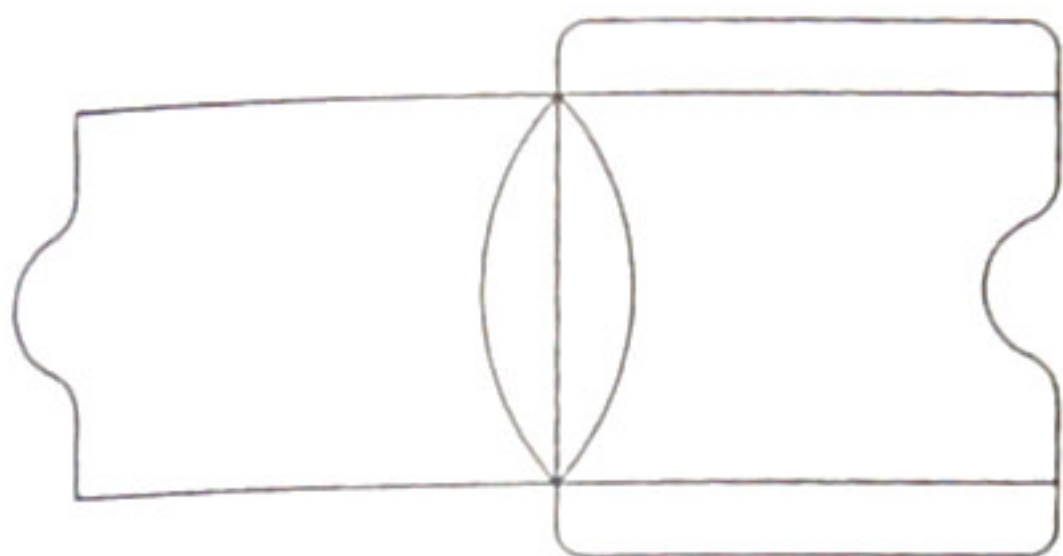




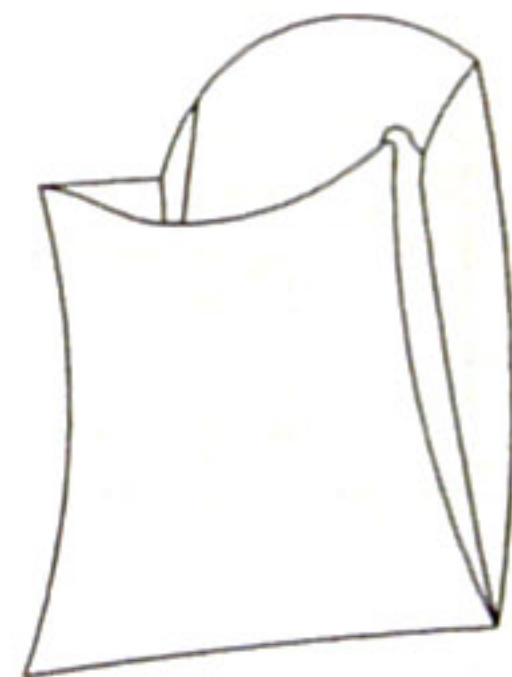
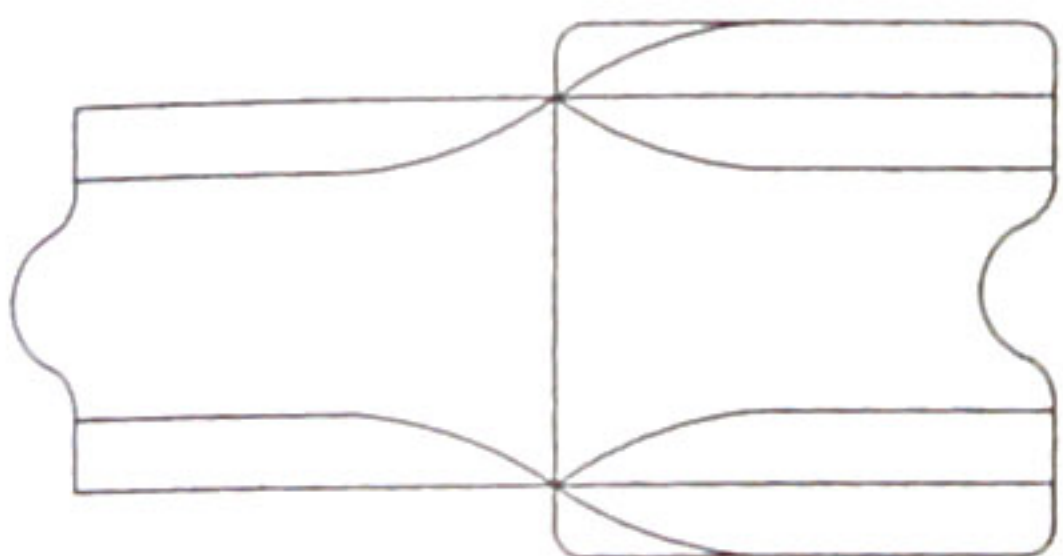
F 7015



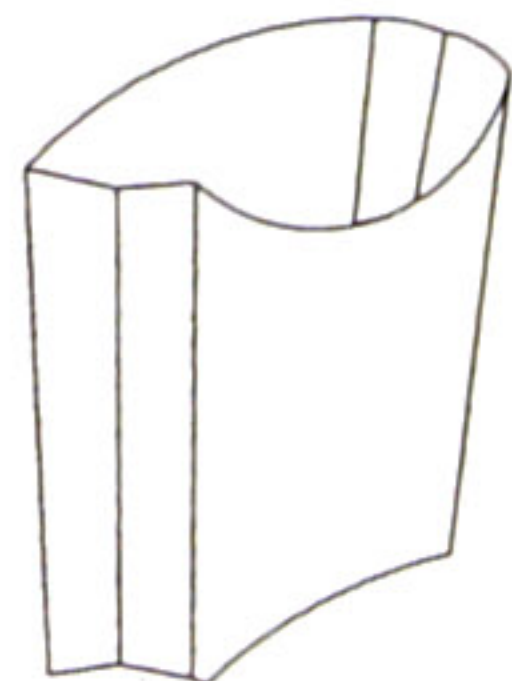
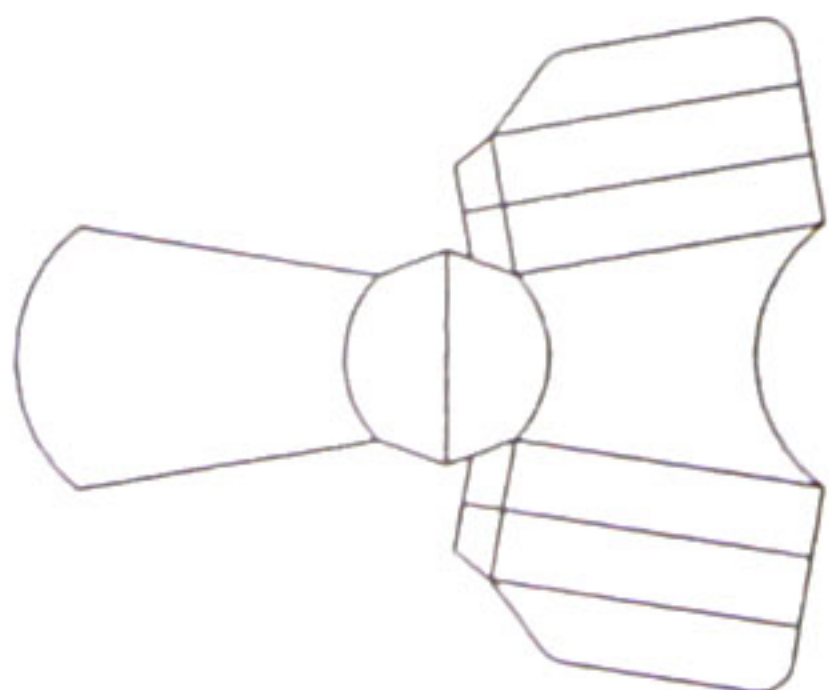
F 7051



F 7052

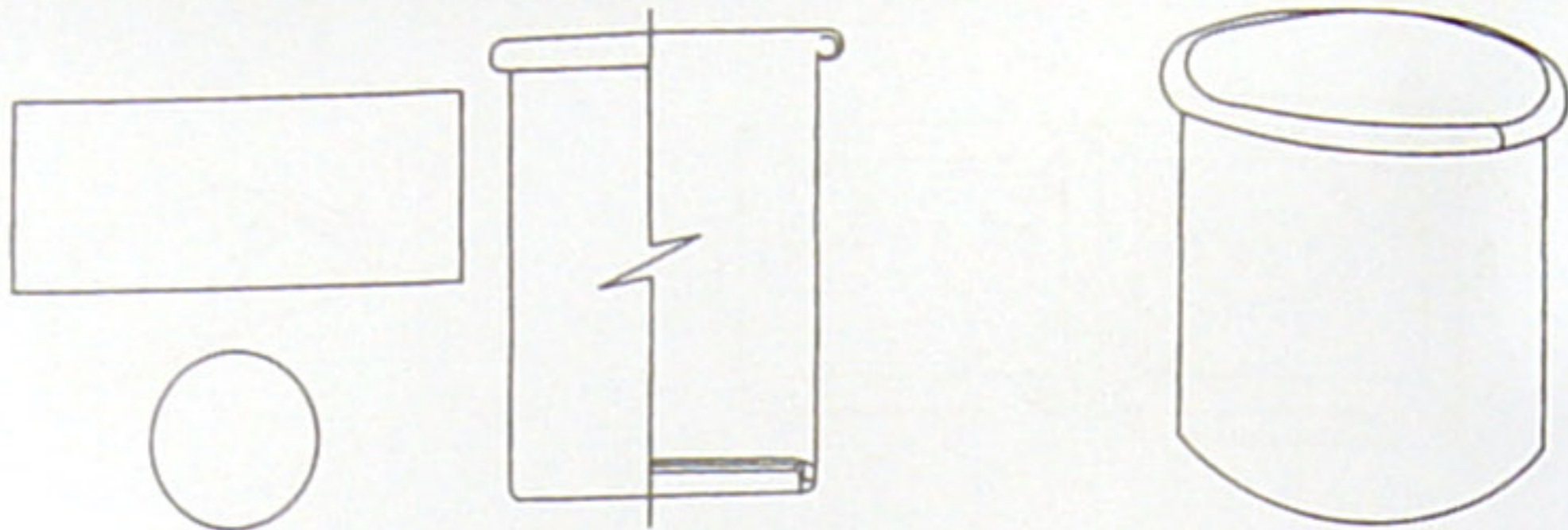


F 7053

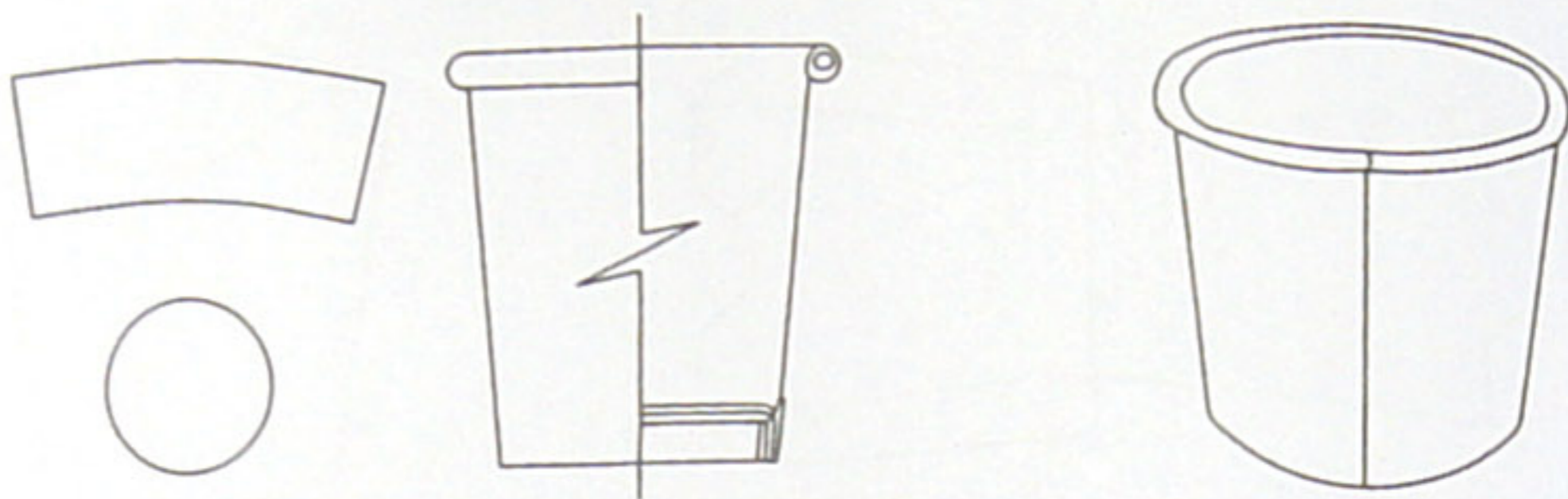


F 7054

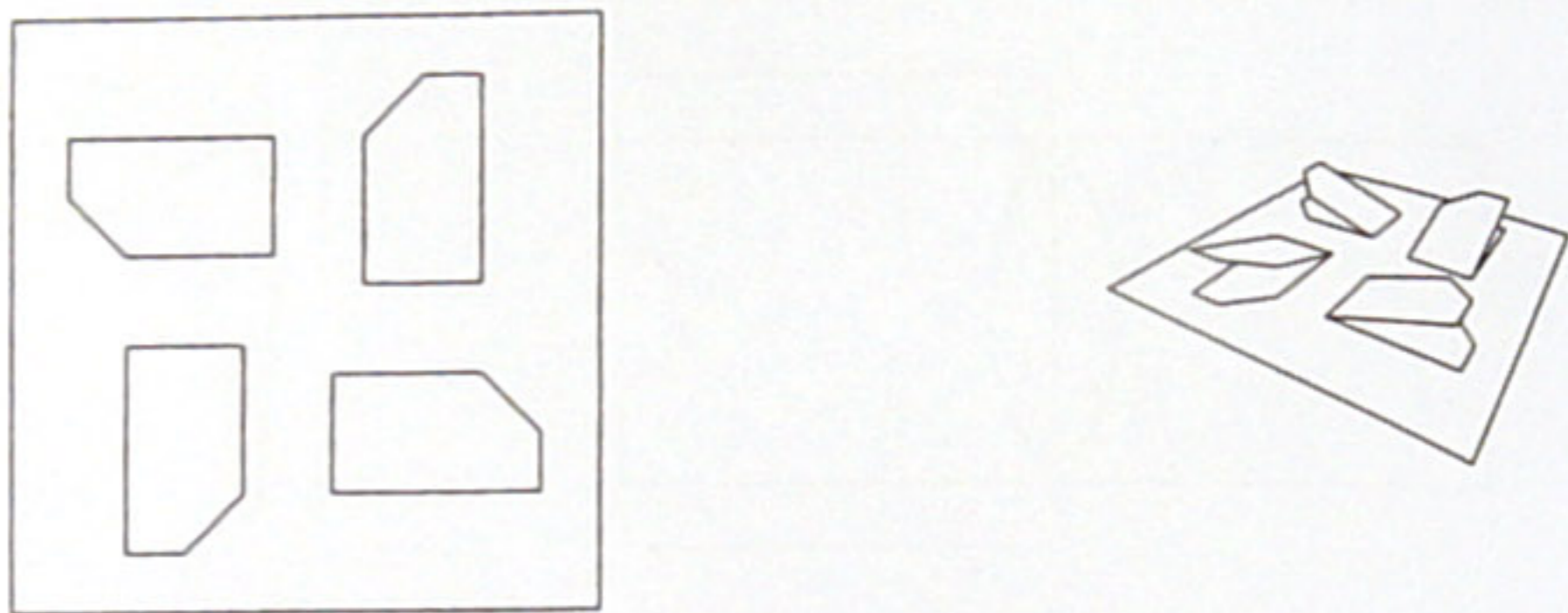
F 7061



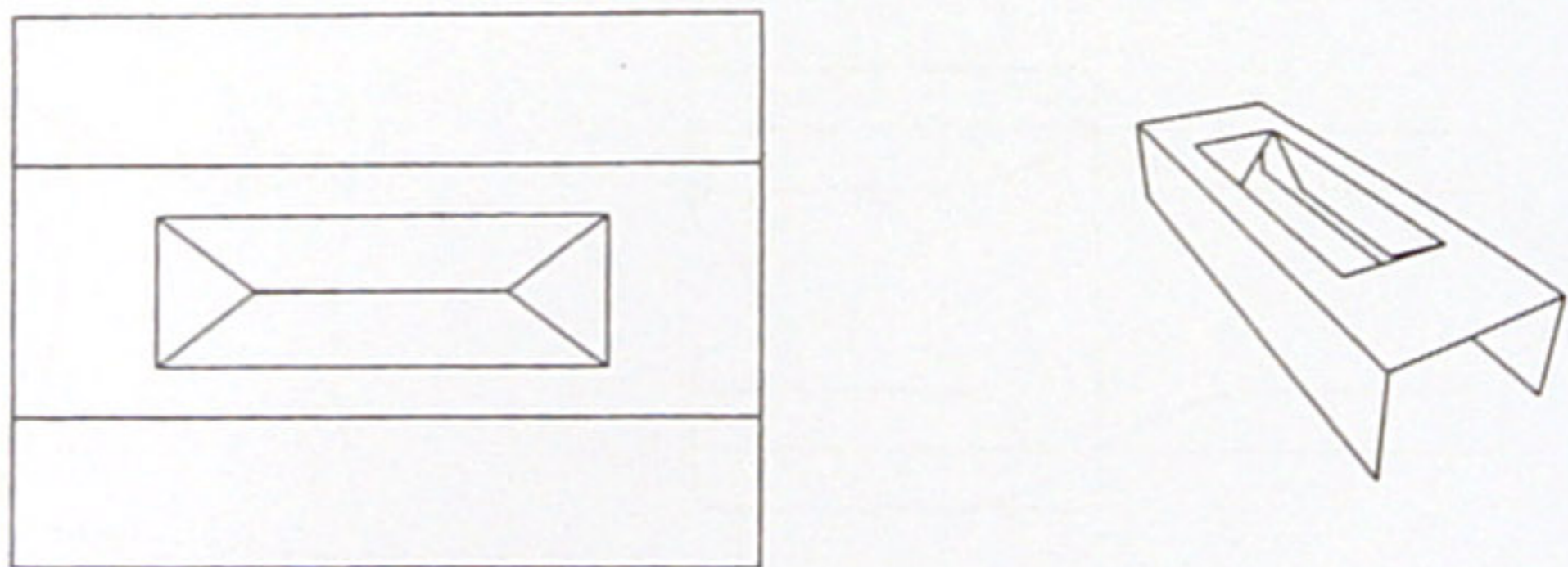
F 7062



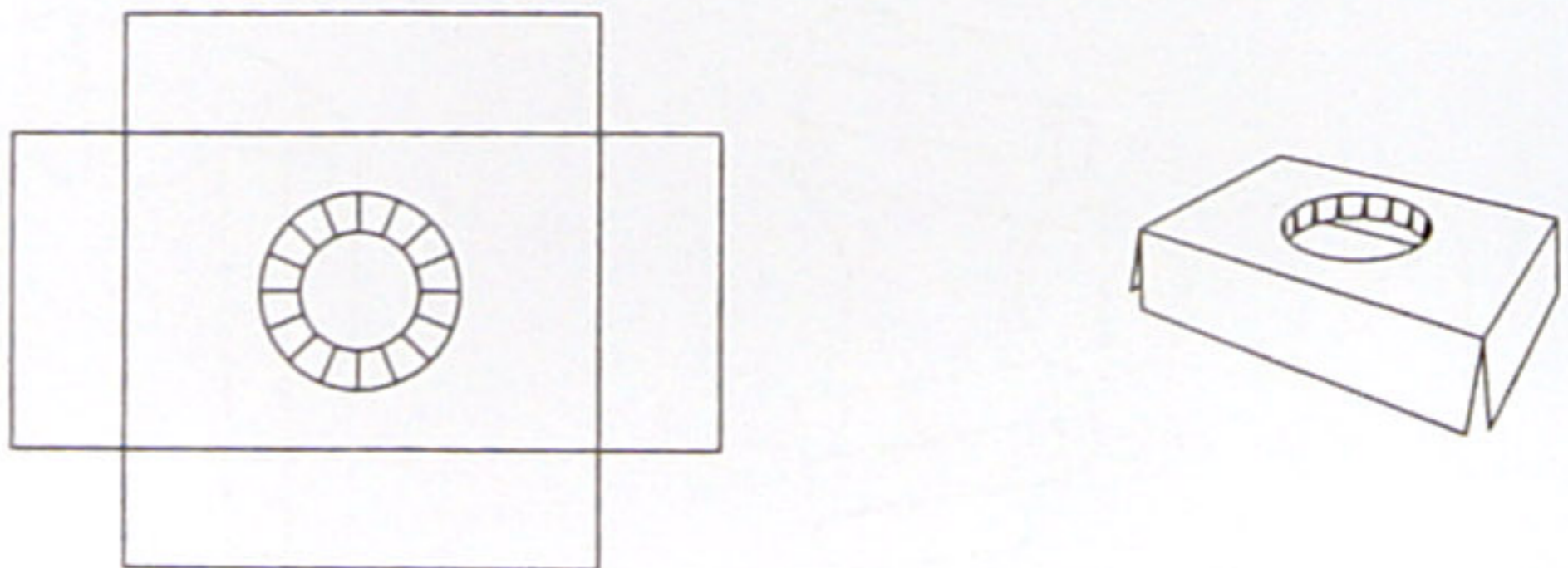
F 8001



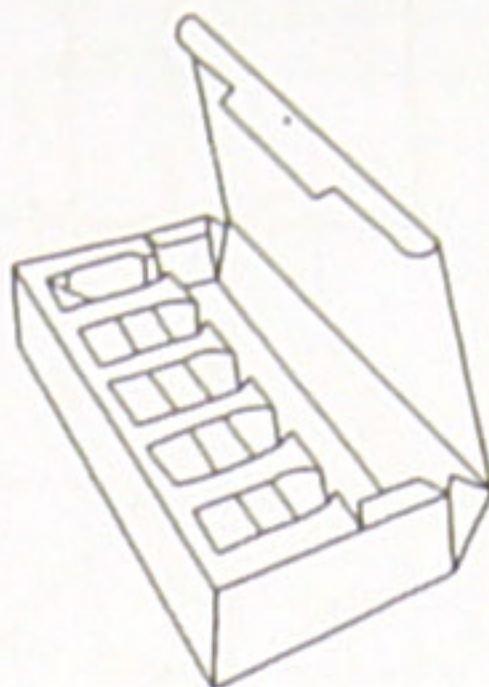
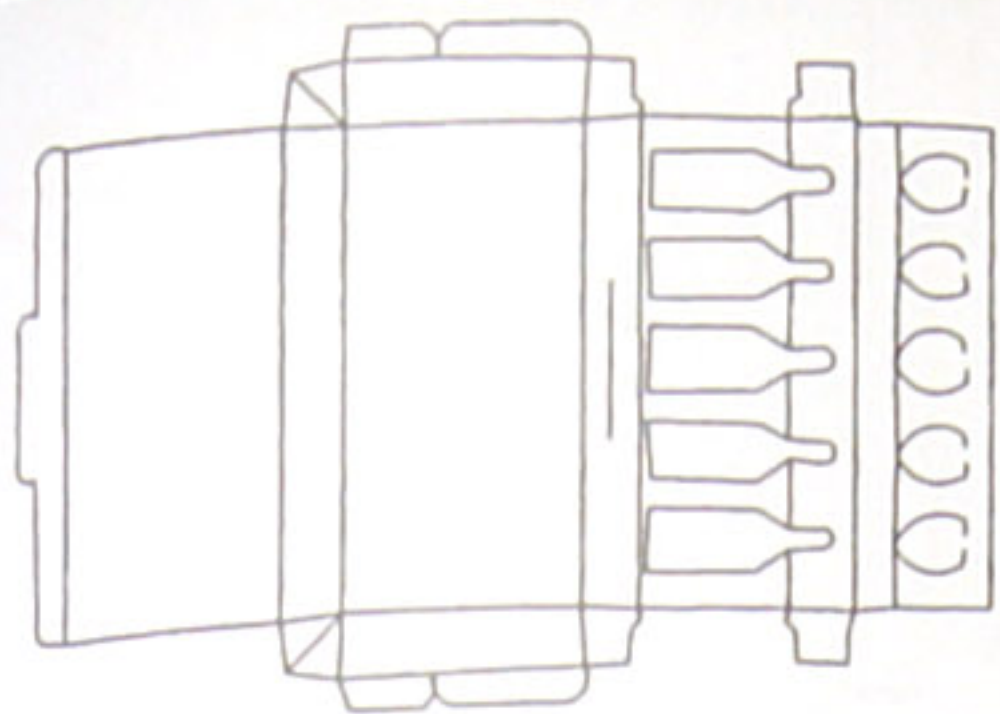
F 8002



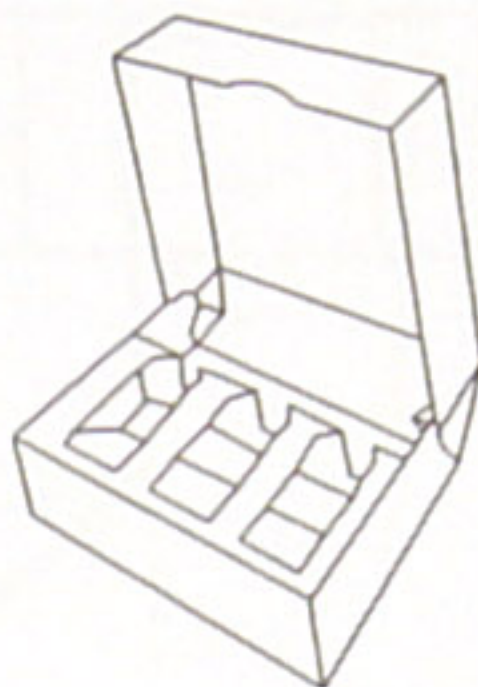
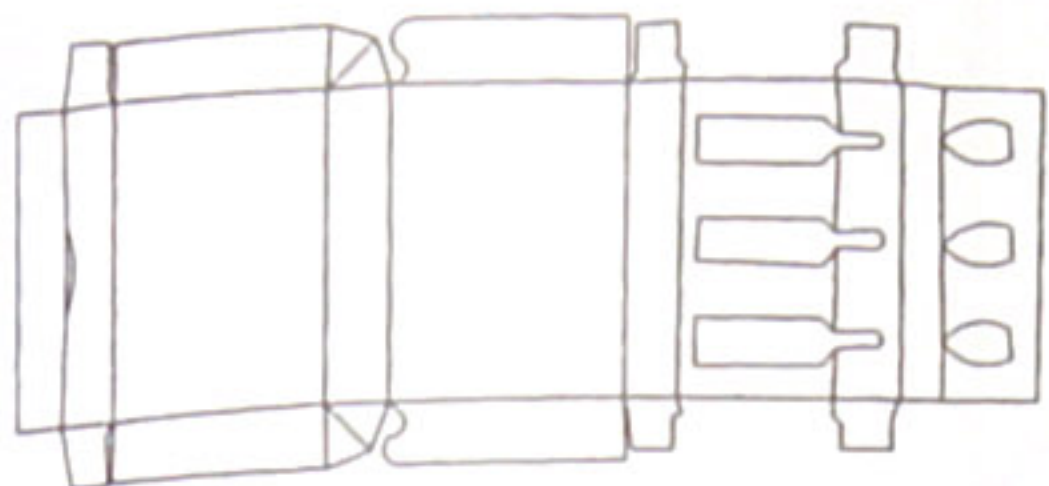
F 8003



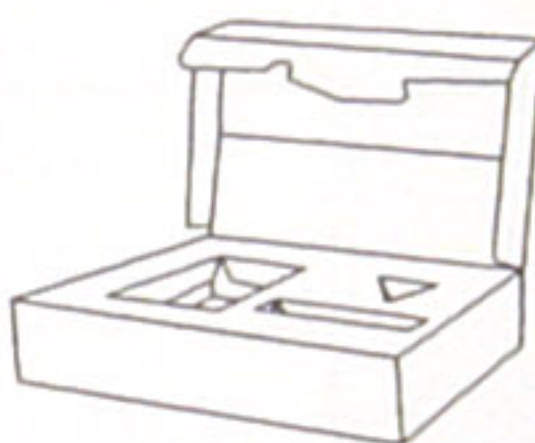
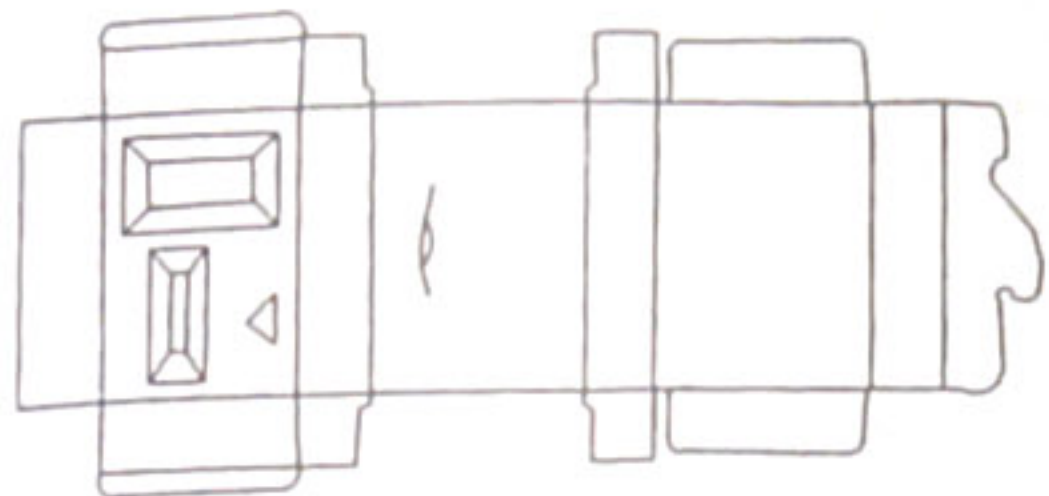




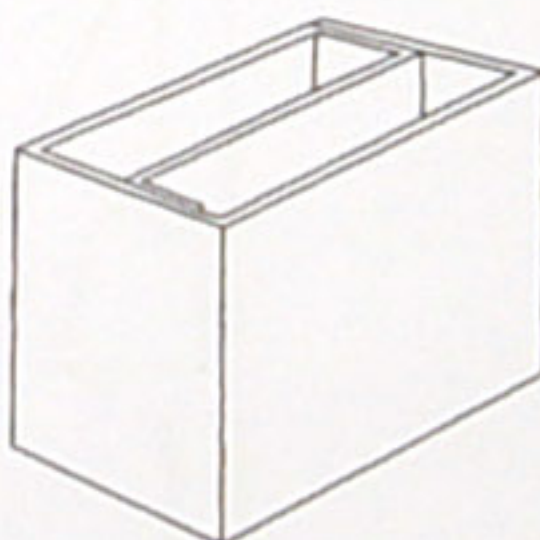
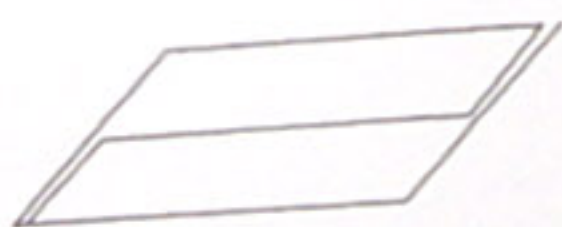
F 8011



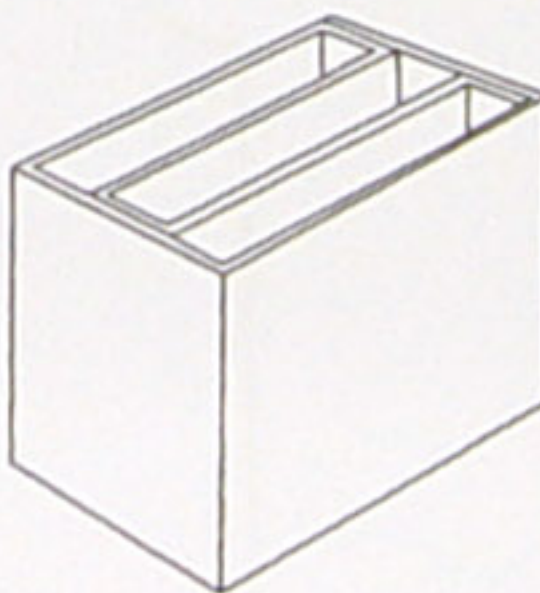
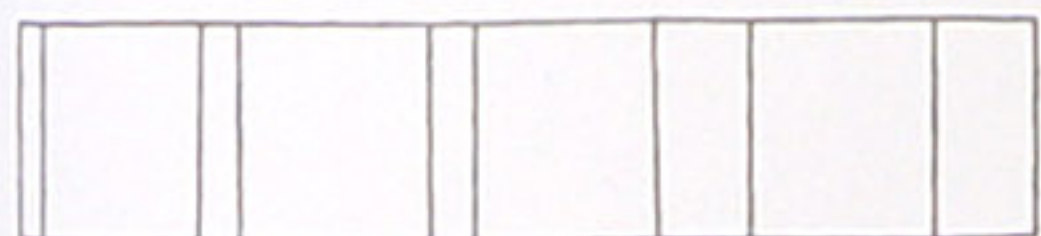
F 8012



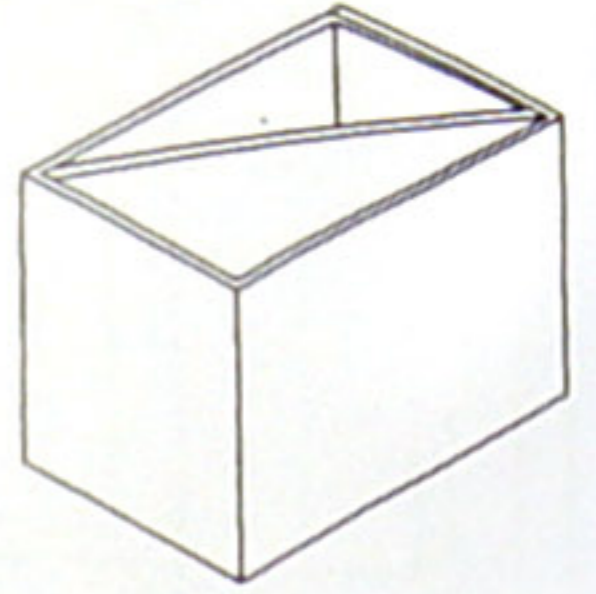
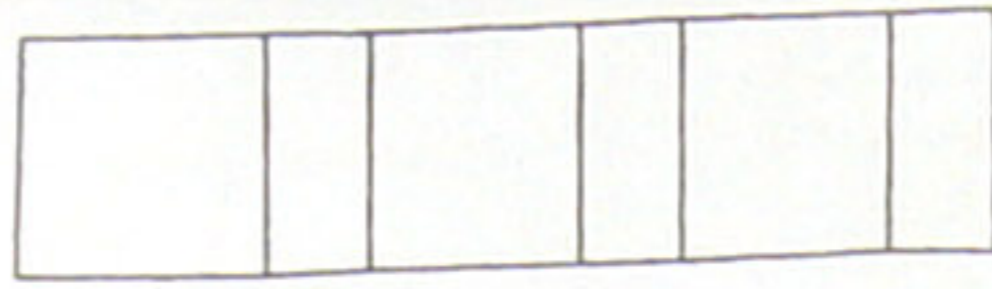
F 8013



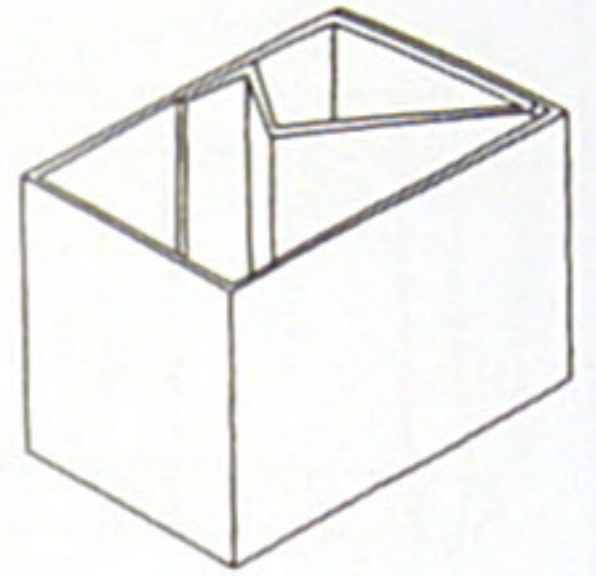
F 8021



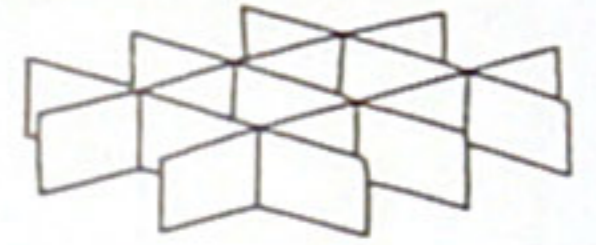
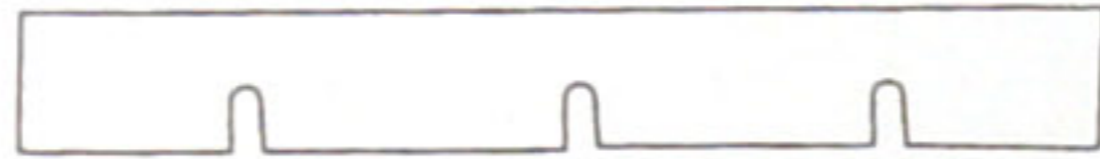
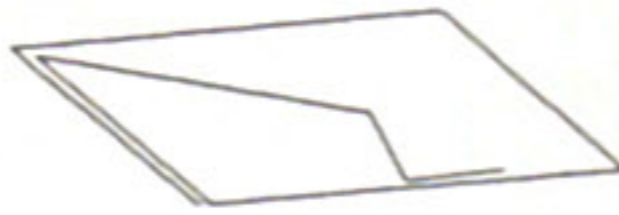
F 8022



F 8023



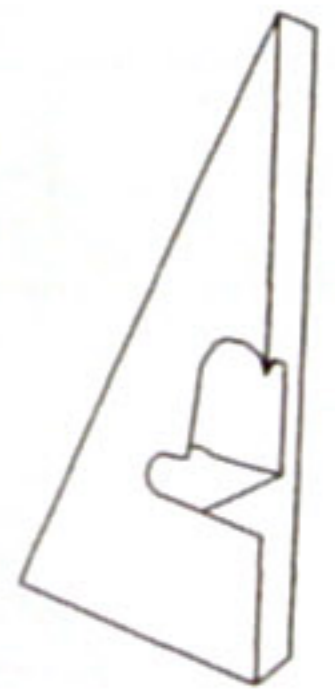
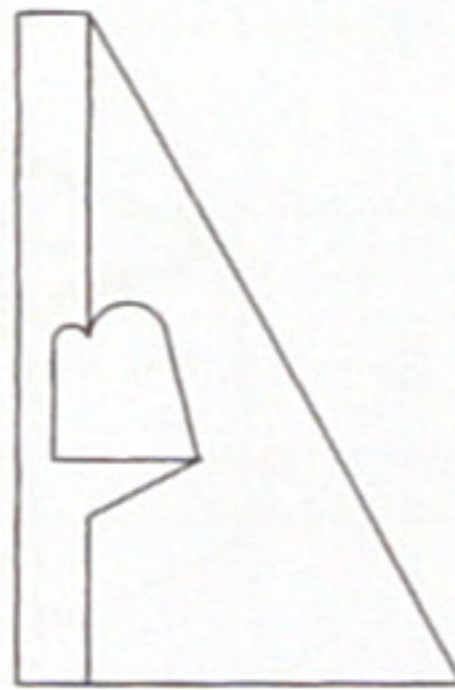
F 8024



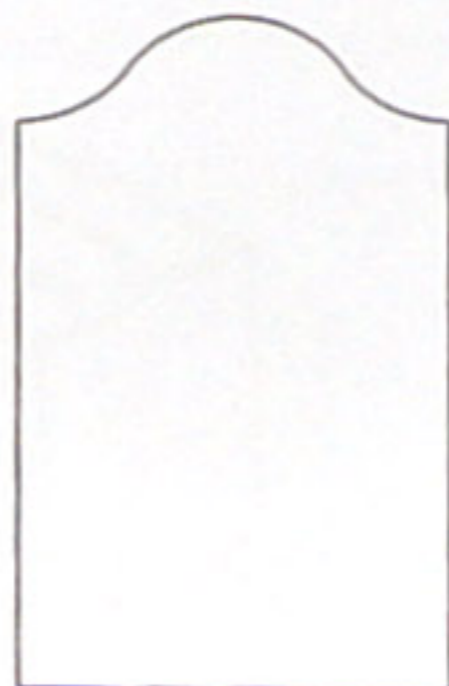
F 8031

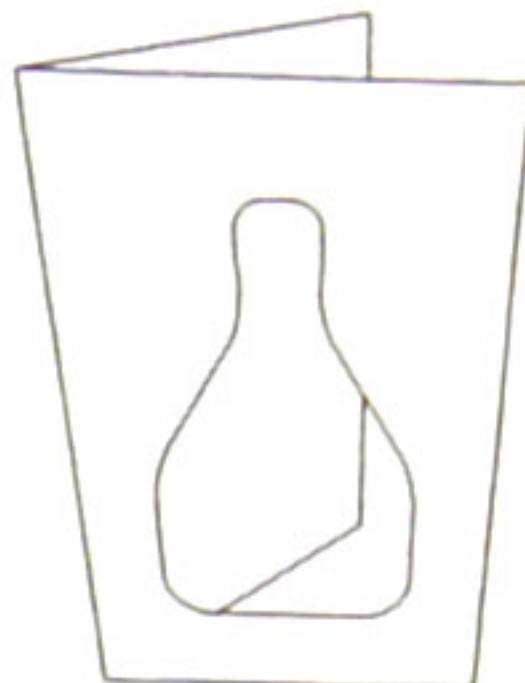
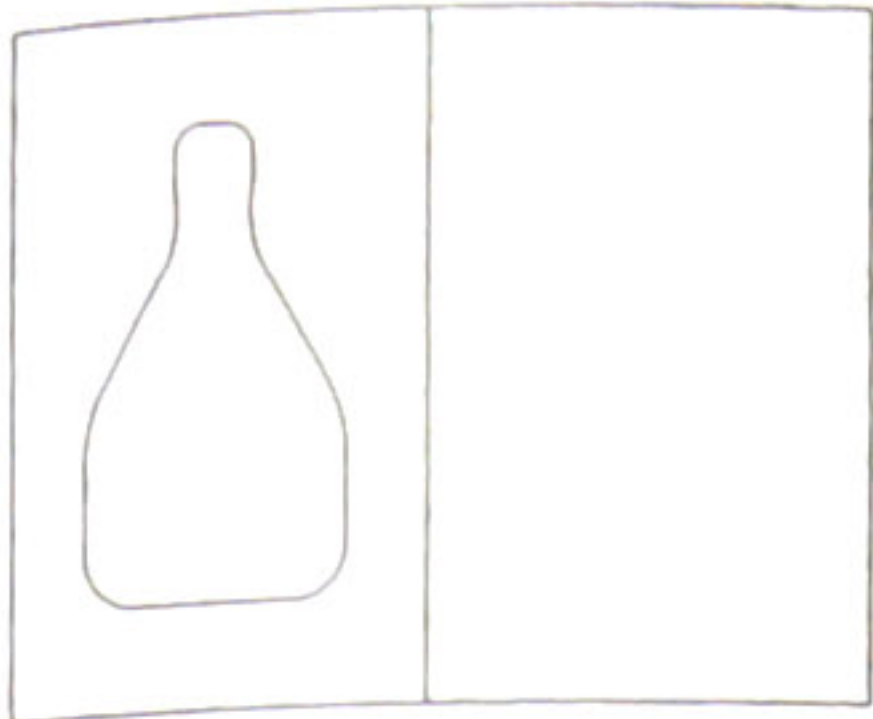


F 8041

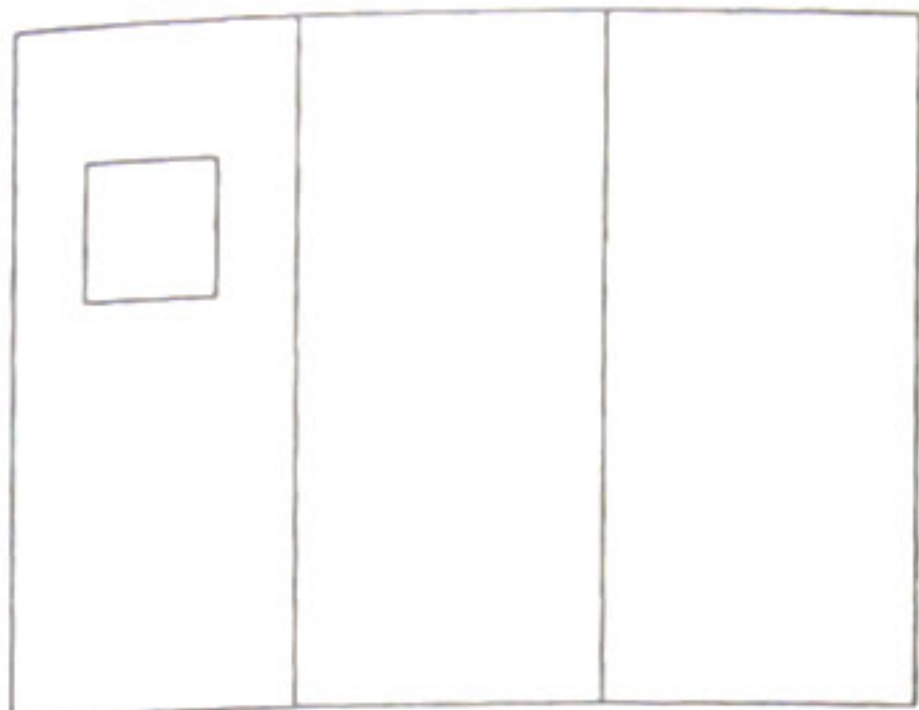


F 8051



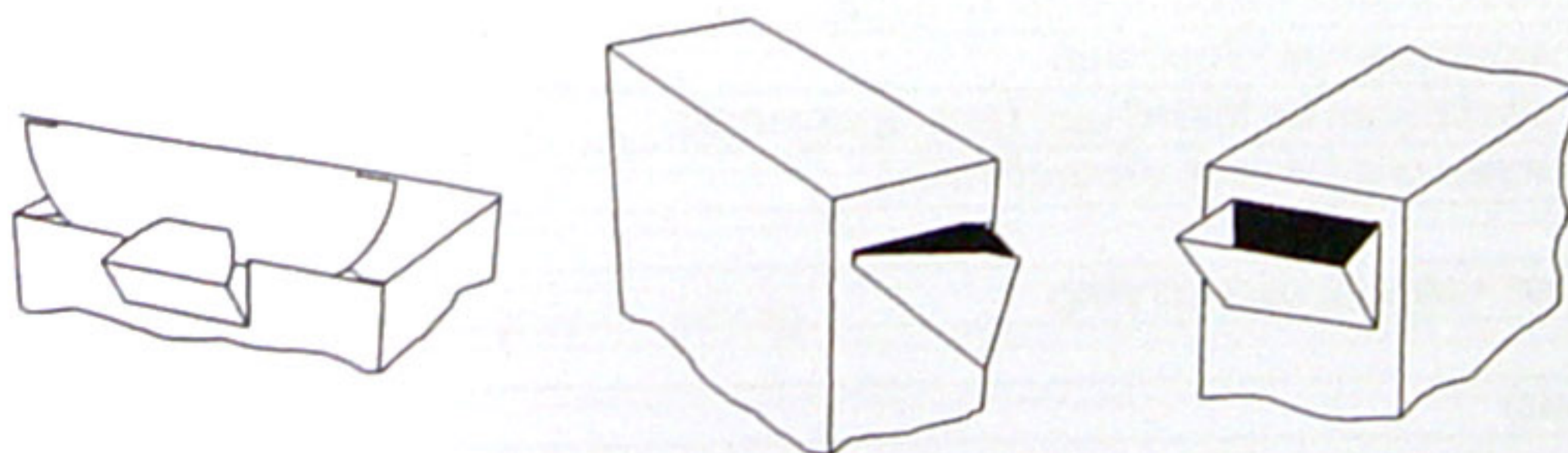
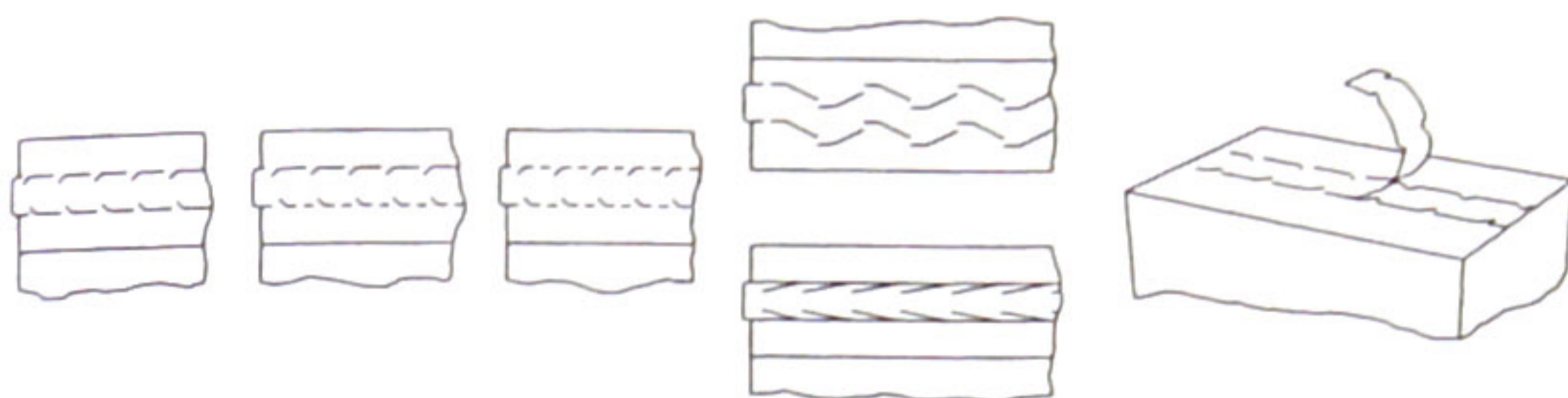


F 8052



F 8053

- X Auxiliary devices of all groups
- X Verschlüsse und Hilfsvorrichtungen
- X Dispositifs complémentaires pour tous groupes
- X Dispositivos auxiliares de todos los grupos
- X Dispositivi ausiliari di tutti i gruppi



**10 zipper flaps**

- 1010 zipper rule
- 1020 tear strip with 2-sided scores
- 1030 reinforcing tape
- 1040 perforated tear out

**20 open & close flaps**

- 2010 4 hook locks with zipper
- 2020 re-closable skillet full width
- 2030 re-closable skillet flaps cut back
- 2040 combination of flaps
- 2041 skillet base tuck in top & full flap – tamper evident
- 2042 crash lock base tuck in lid with 3 flaps glued
- 2043 skillet base flap with zipper rule top
- 2050 zipper over packaging edge & defined upper surface, short edge
- 2051 long edge

**30 opening/safety flaps**

- 3010 aerotuck – full width locking flap
- 3020 skillet flaps with 2 locking lugs
- 3030 reverse tuck end with postal locks

**40 pour-out devices**

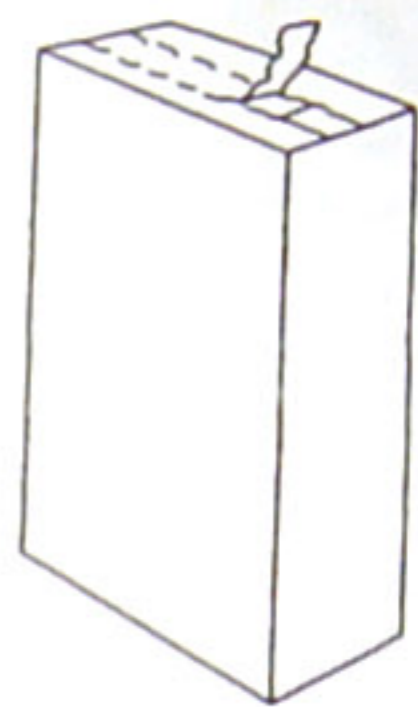
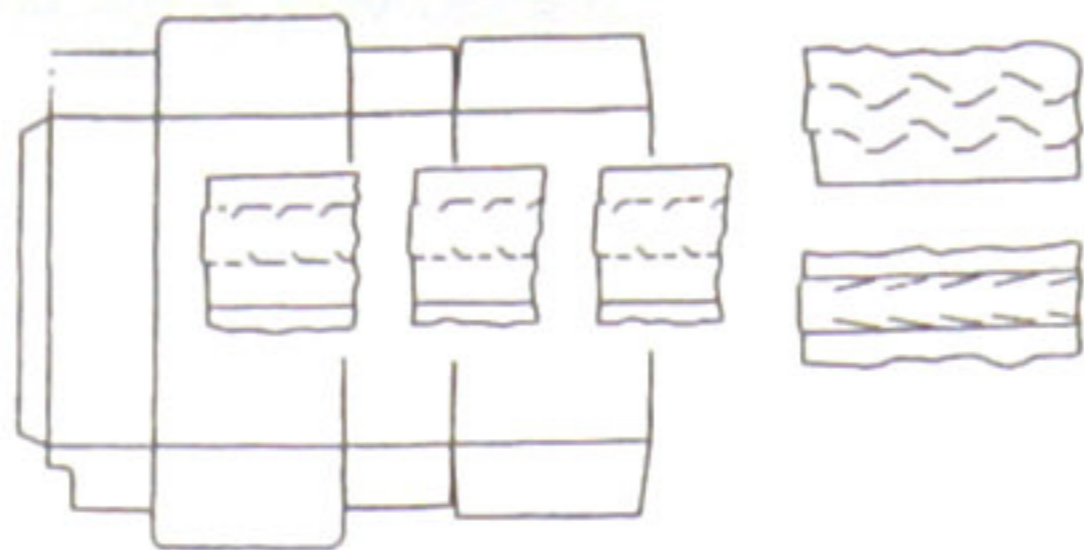
- 4010 not re-closable flap
- 4011 push in pourer
- 4020 re-closable flap using extended glue flap (monomaterial)
- 4021 tear down pourer
- 4022 tear across pourer
- 4023 re-closable pourer
- 4024 can be folded out on crease & cut lines (on side)
- 4025 dust flap can be folded out
- 4030 re-closable pourer made of other material
- 4031 metal (can be folded out)
- 4035 plastic (can be folded out) (not revented)
- 4036 screw cap (of wrap around bottle)

**50 devices for hanging up/carrying**

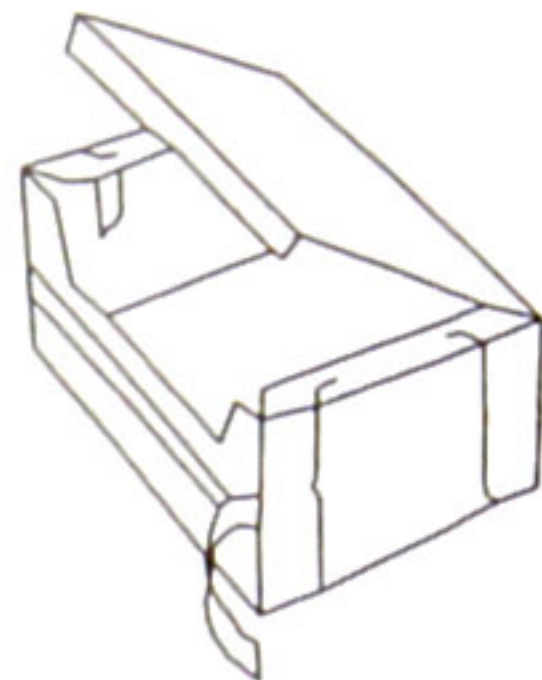
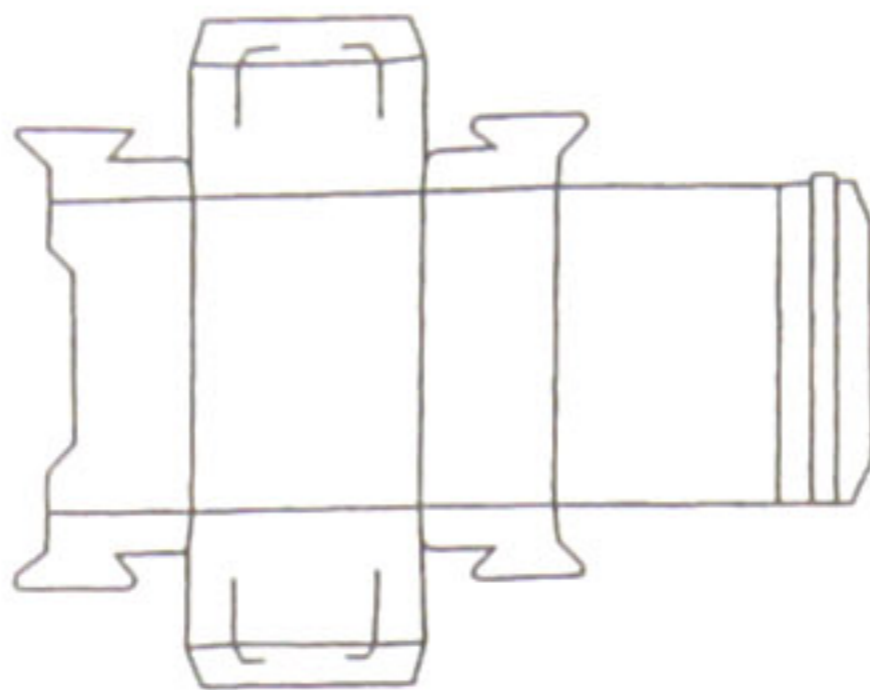
- 5010 euro slot
- 5020 carrying handle

**Warning:** for patents and other protective rights see introduction page i 3, letter B.

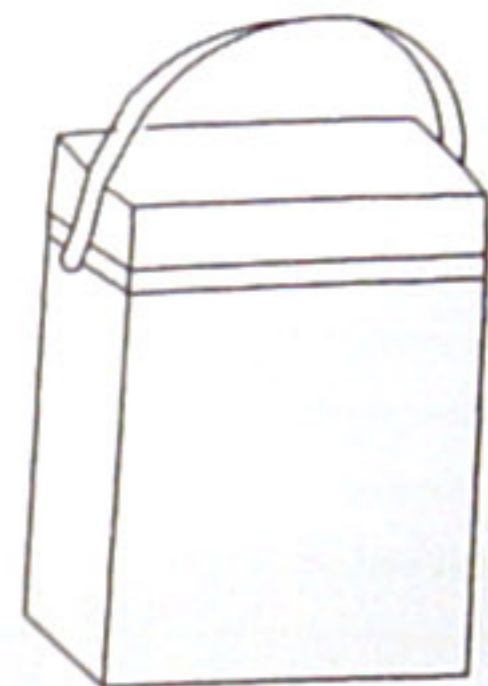
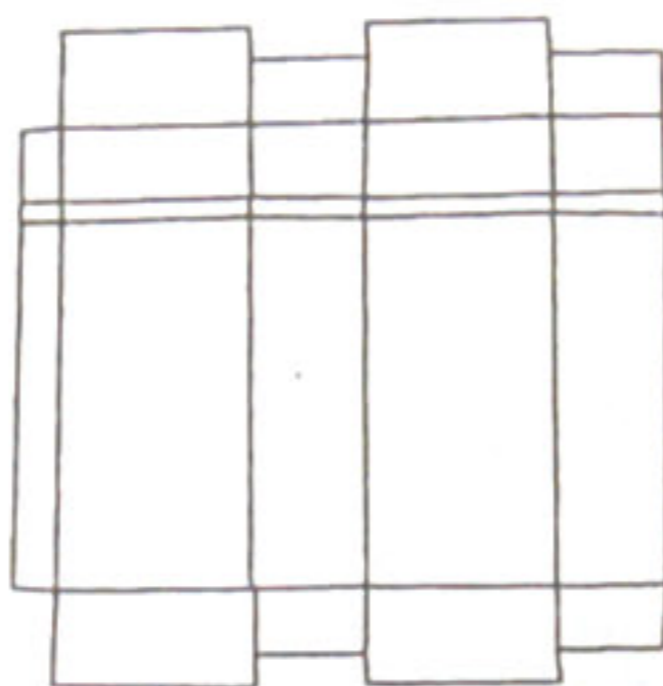
X 1010



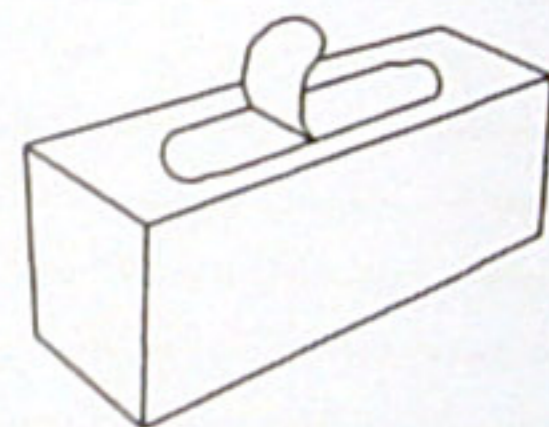
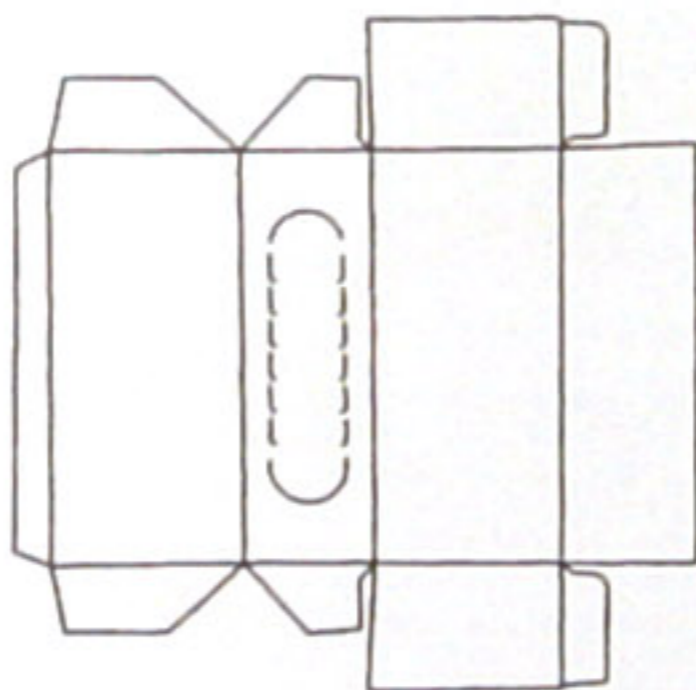
X 1020



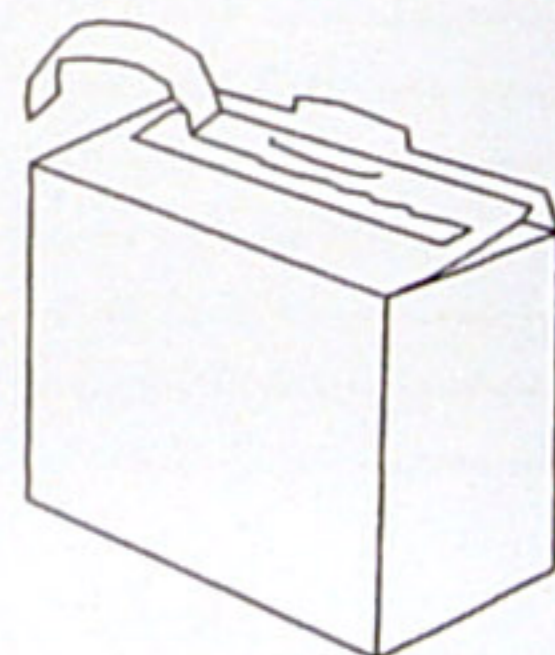
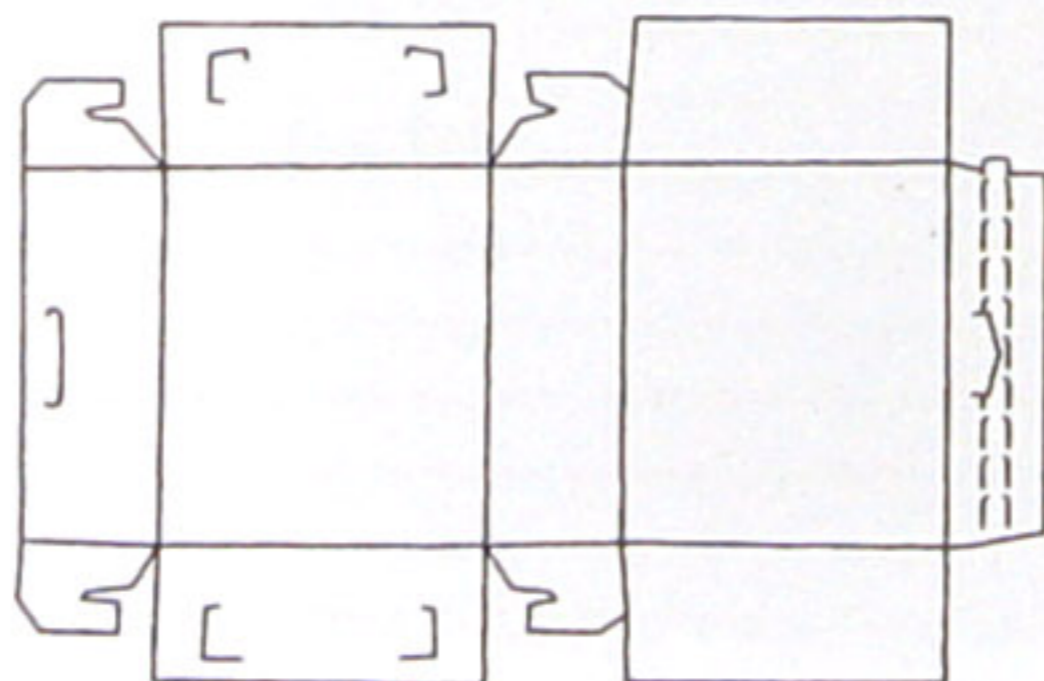
X 1030

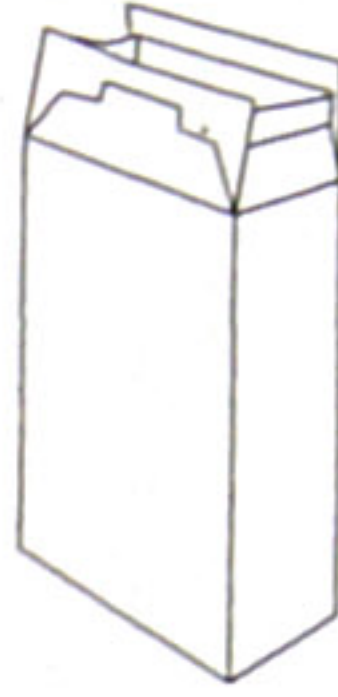
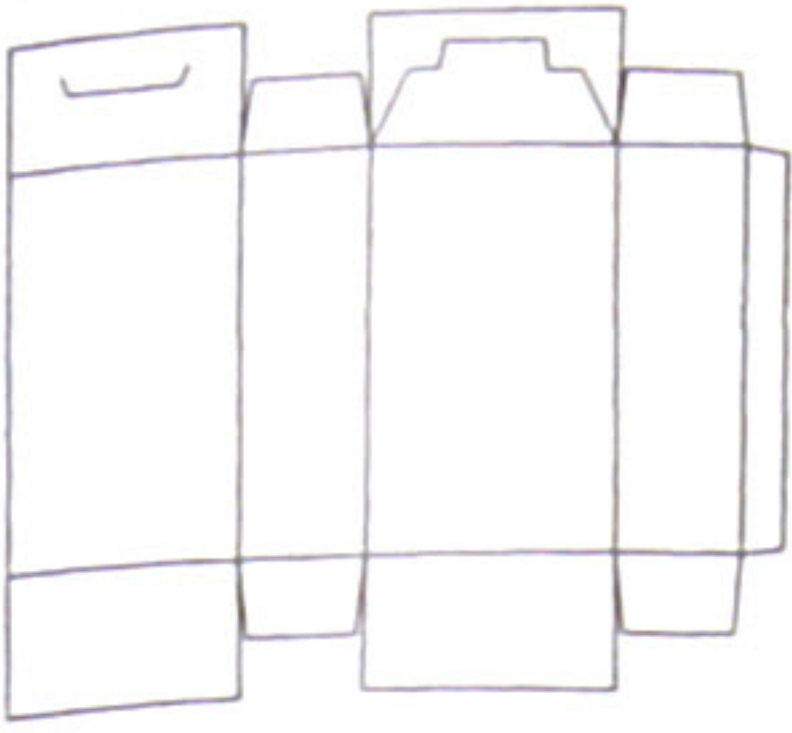


X 1040

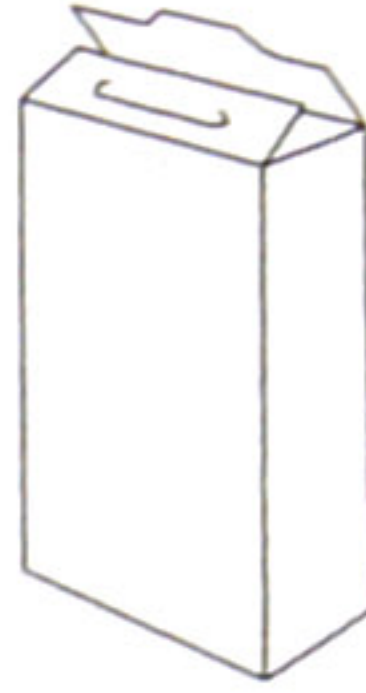
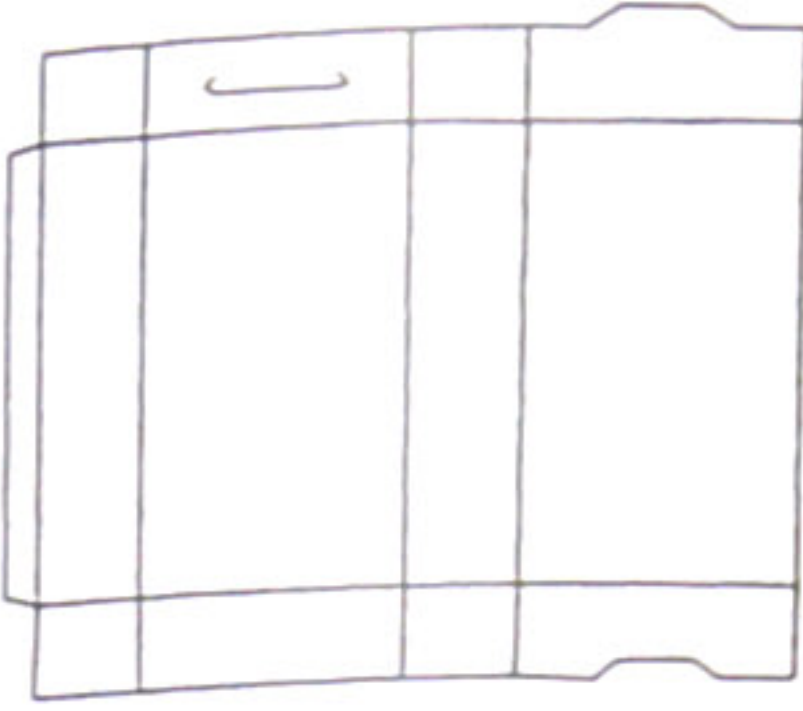


X 2010

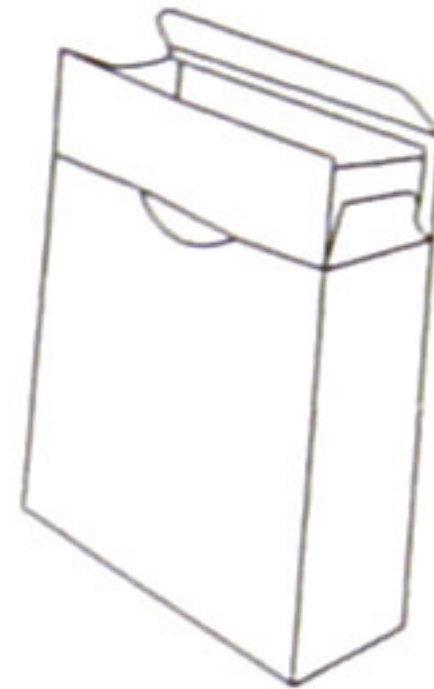
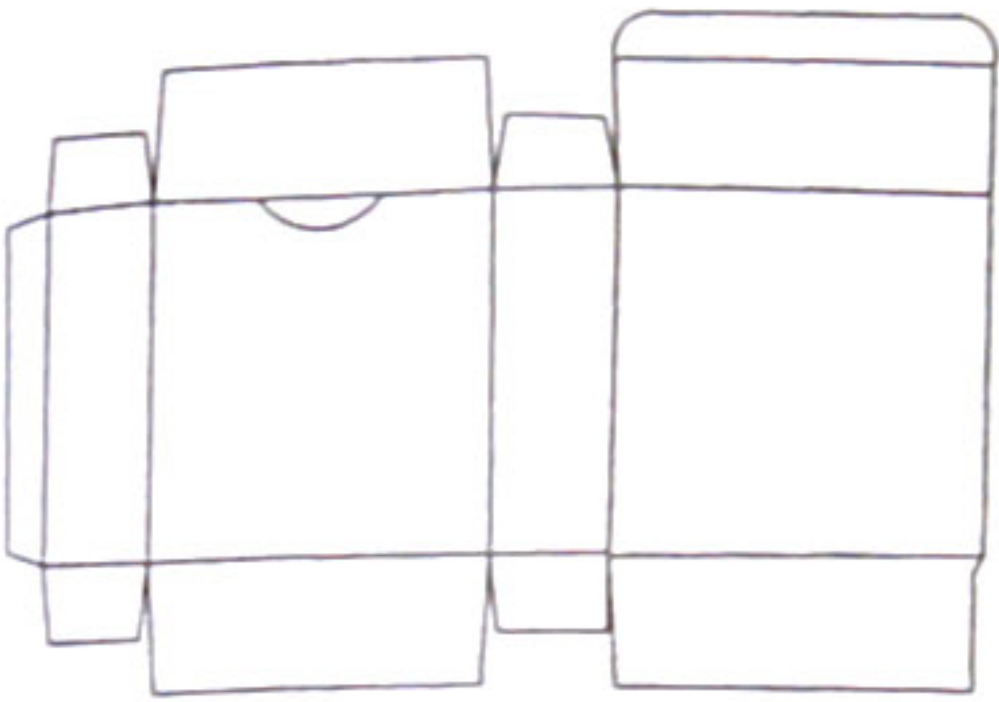




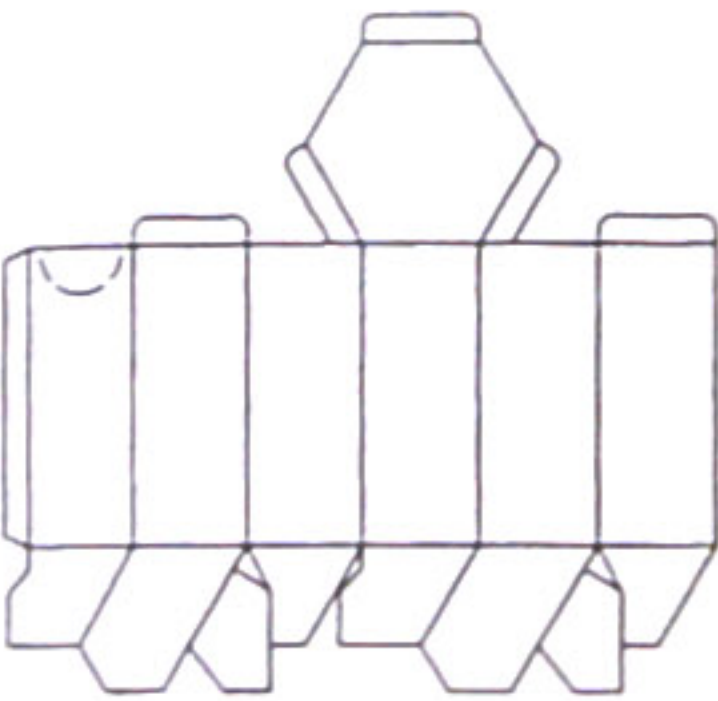
X 2020



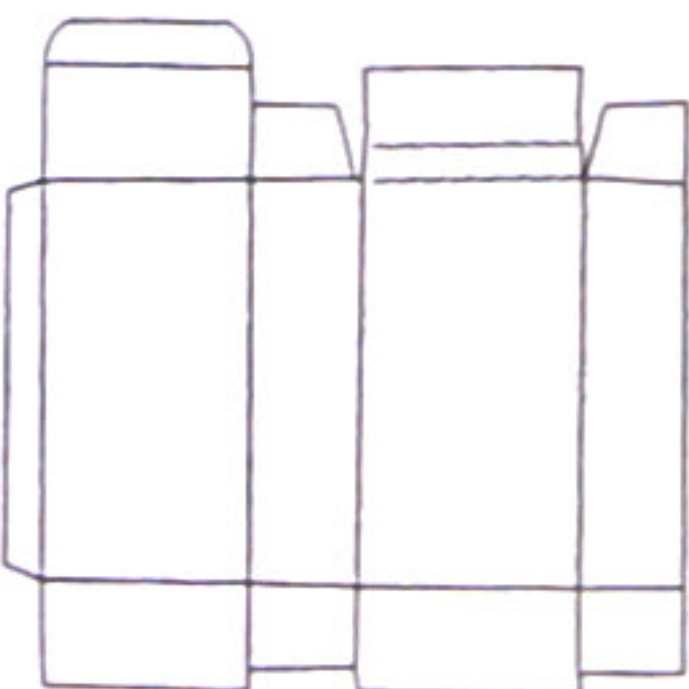
X 2030



X 2041

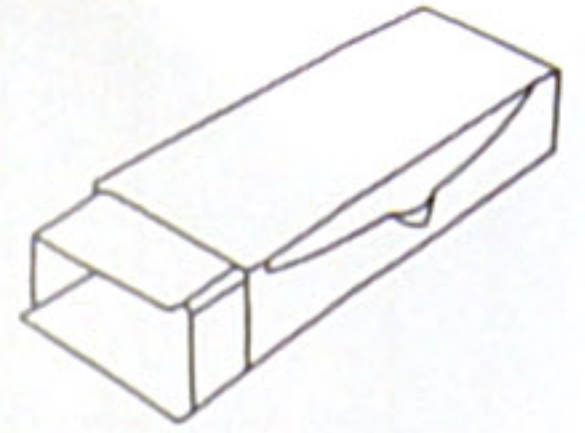
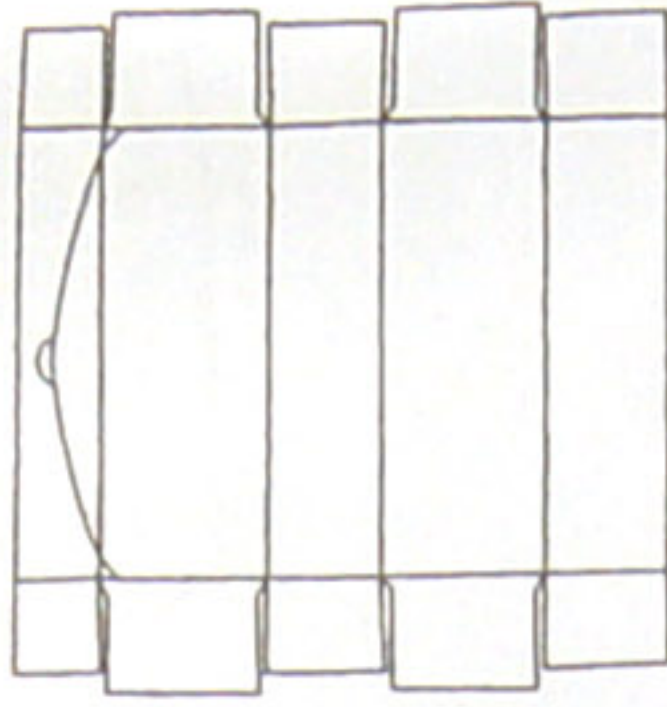


X 2042

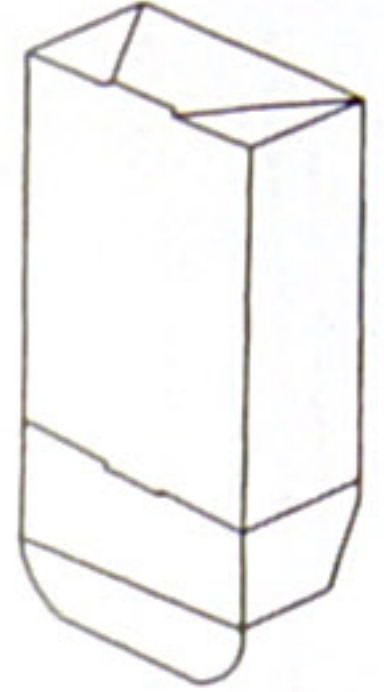
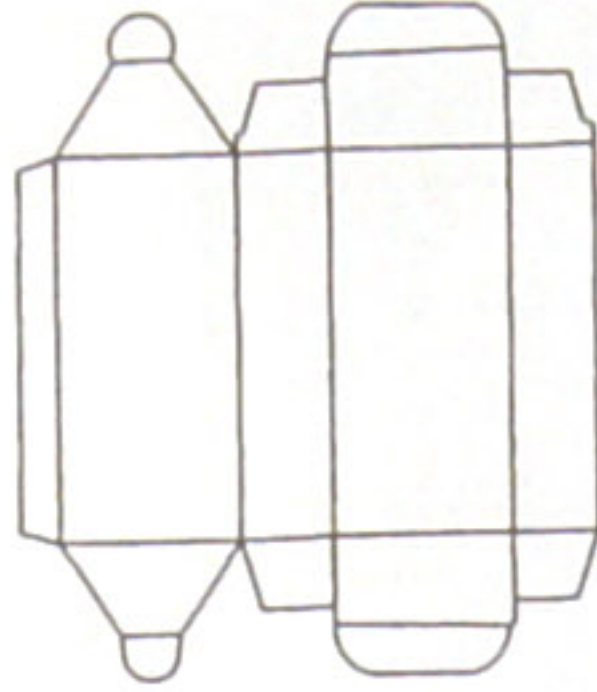


X 2043

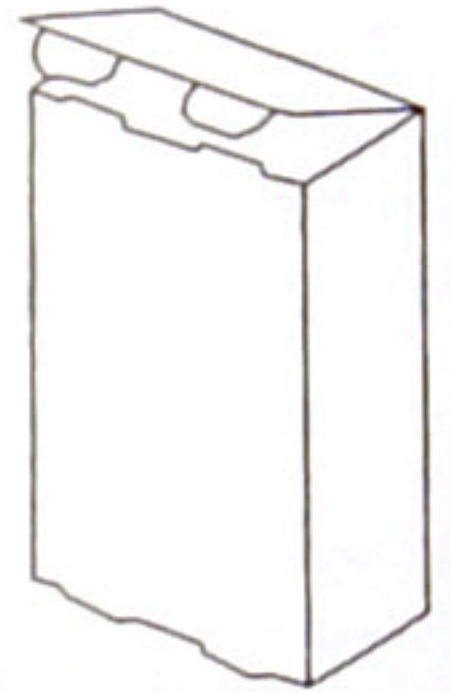
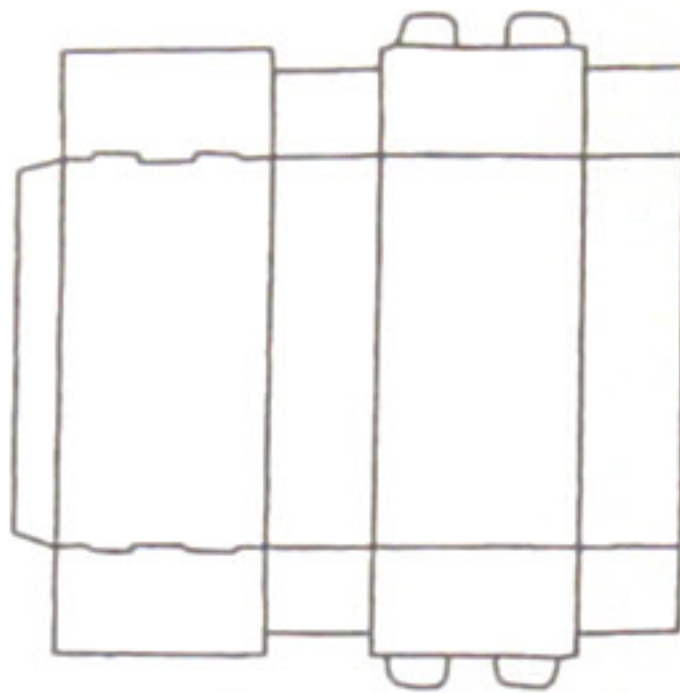
X 2051



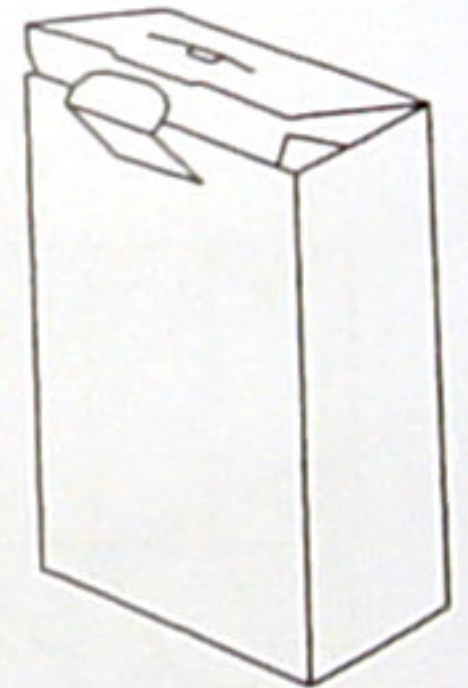
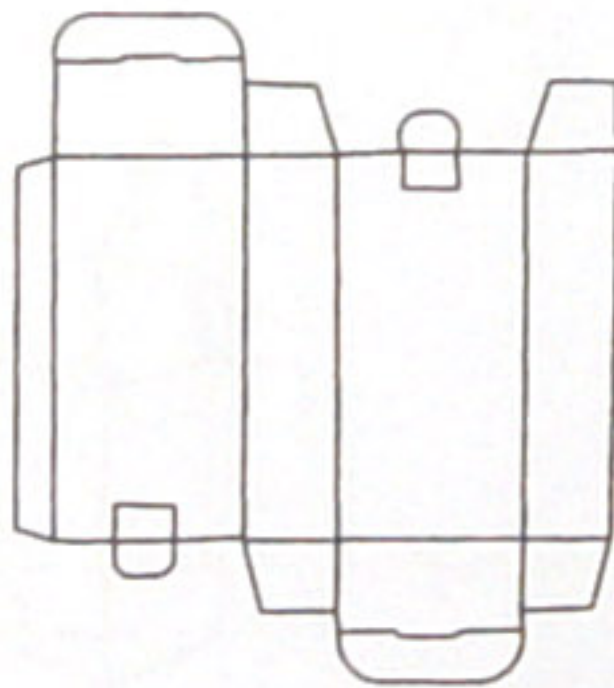
X 3010



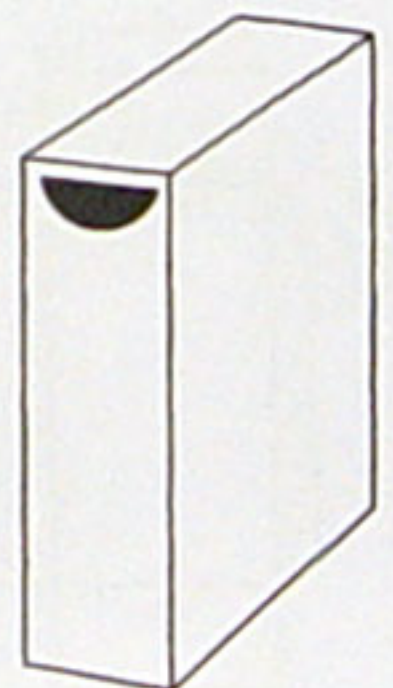
X 3020



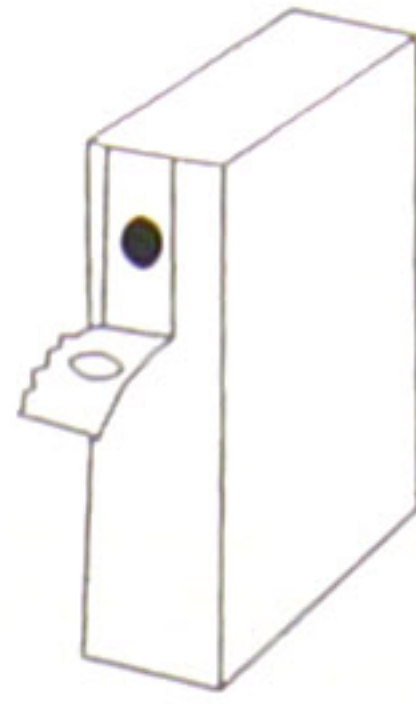
X 3030



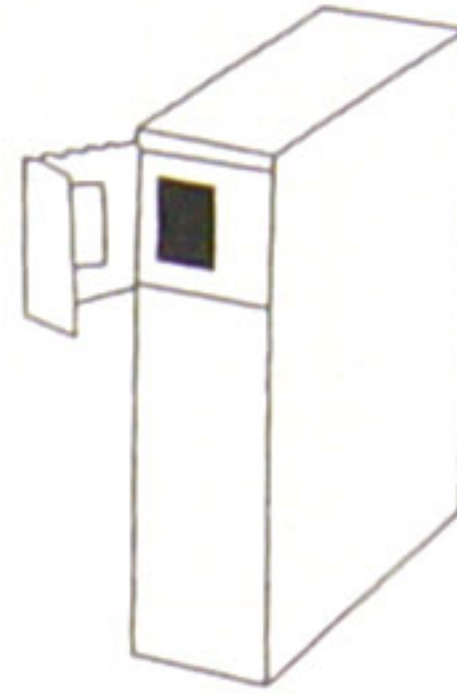
X 4011



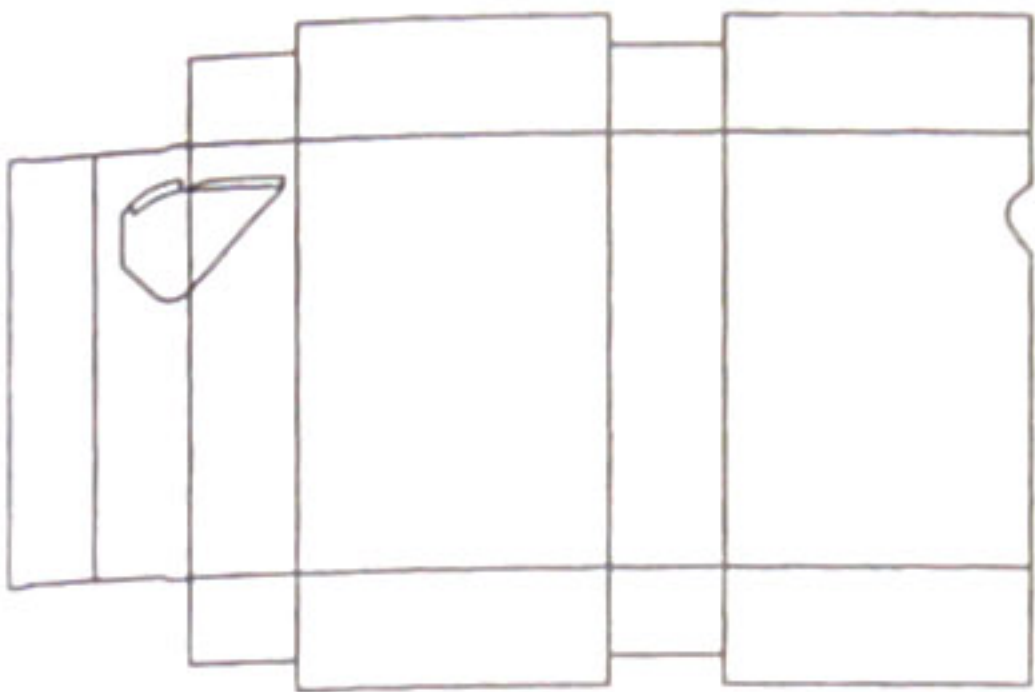




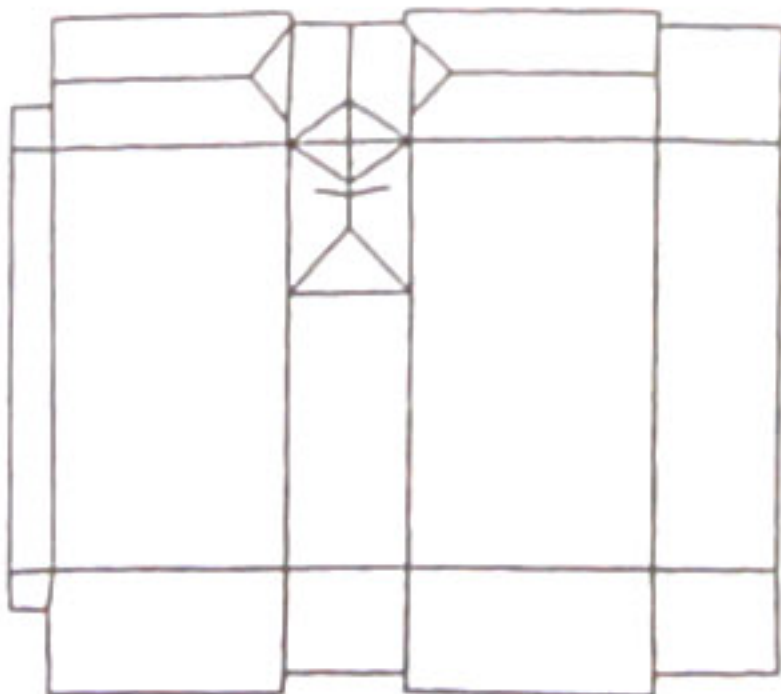
X 4021



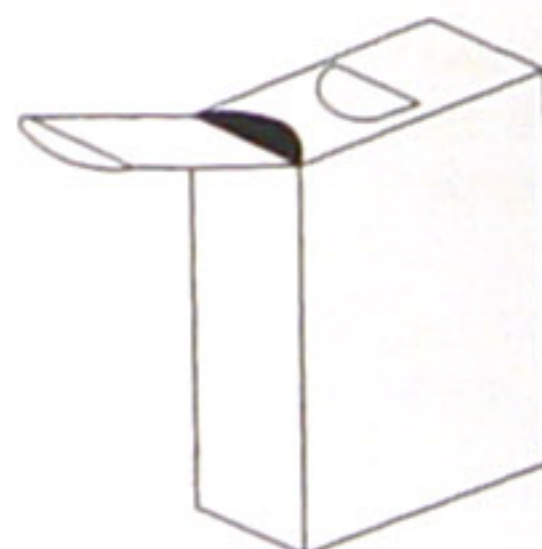
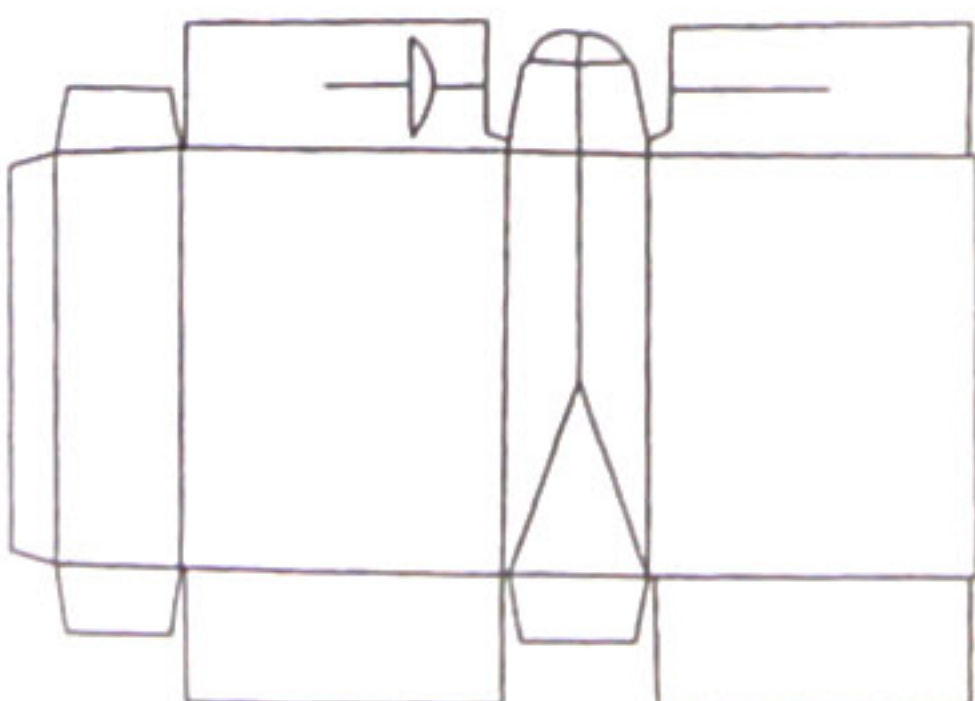
X 4022



X 4023

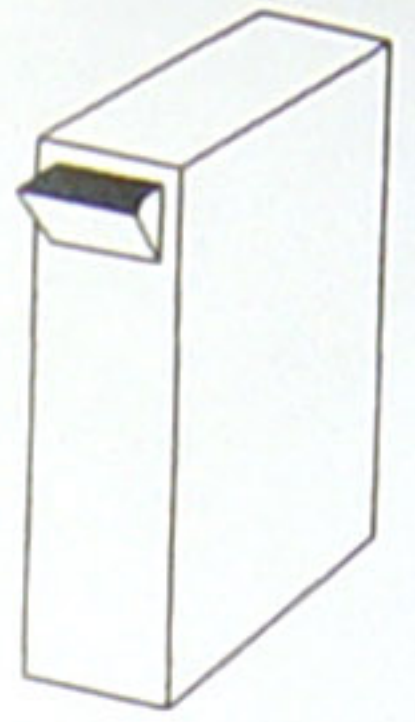


X 4024

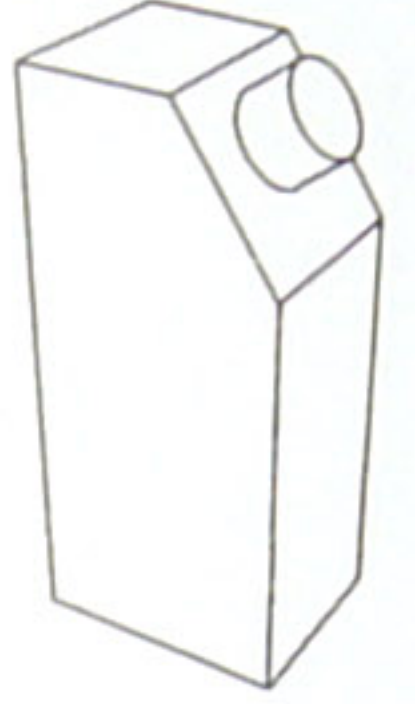
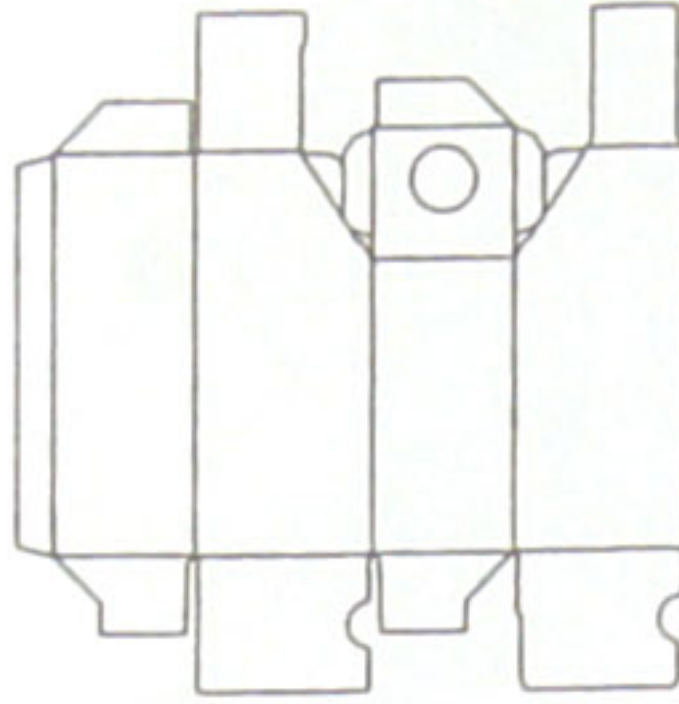


X 4025

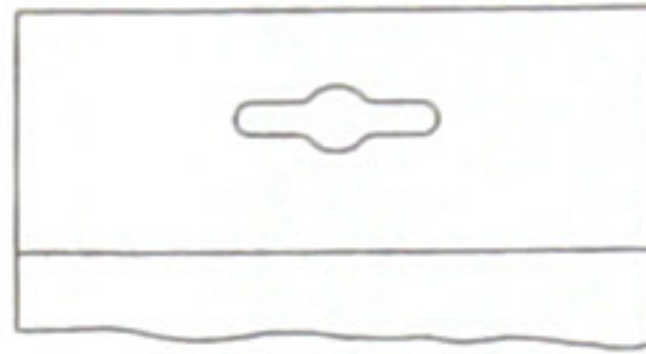
X 4031



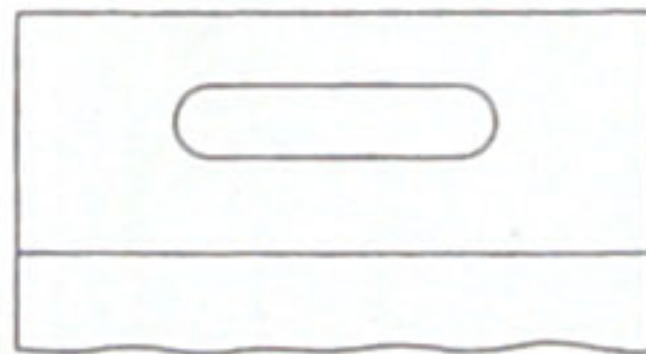
X 4036



X 5010



X 5020



4. Appendix

4.1. ECMA Code «OLD → NEW» / «ALT → NEU»

OLD ECMA CODE → NEW ECMA CODE							
OLD	NEW	OLD	NEW	OLD	NEW	OLD	NEW
A 111	A 2420*	A 860	A 3045°	D 121	B 2350°	E 210	A 1020*
A 112	A 2220*	A 870	A 4045°	D 131	B 2150*	E 410	B 4010*
A 113	F 1001*	A 880	A 4545°	D 112	B 2252°	E 111	A 2420*
A 114	F 1002*	A 910	A 2001*	D 122	B 2352°	E 220	A 1010*
A 115	F 1003*	A 920	A 1001*	D 150	B 2411*	E 411	B 4150*
A 210	A 1020*	A 930	A 5001*	D 210	B 3210*	E 112	A 2220*
A 220	A 1010*	A 940	A 5501*	D 220	B 3310*	E 230	F 6014*
A 310	A 2050°	A 950	A 6001*	D 230	F 6006*	E 420	B 4011*
A 320	A 1050°	A 960	A 3001*	D 211	B 3250°	E 421	B 6021*
A 330	A 5050°	A 970	A 4001*	D 221	B 3450°	E 510	F 6001*
A 410	A 5520*	A 980	A 4501*	D 222	B 3452°	E 520	F 6003*
A 420	A 5510°	A 990	A 0101*	D 240	B 3010*	E 530	F 6011*
A 430	A 5550°	A 993	F 1001*	D 241	B 3050°	E 810	E 4082*
A 510	A 6020*	A 994	F 1002*	D 402	B 4410*	E 820	E 4080*
A 520	A 6010°	A 995	F 1003*	D 403	B 4610*	E 990	A 0101*
A 530	A 6050°	B 110	B 1010*	D 404	B 4810*	E 910	A 2301°
A 610	A 2430°	B 111	B 1110°	D 412	B 4450°	E 920	A 1001*
A 620	A 1030°	B 120	B 1011*	D 420	B 4010*	E 993	F 3001*
A 630	A 5030°	B 210	B 1020*	D 610	F 8041*	F 120	B 4020*
A 640	A 5530°	B 213	B 2020*	D 620	F 8001*	F 121	B 4050°
A 650	A 6030°	B 220	B 1021*	D 710	B 4052°	F 122	B 6020*
A 660	A 3430°	B 221	B 1111*	D 810	E 4082*	F 211	F 7011*
A 601	A 2056°	B 310	B 1221*	D 811	E 4082*	F 214	E 2010*
A 606	A 5656°	B 320	B 1221*	D 820	E 4081*	F 222	C 4220*
A 710	A 2040°	B 321	B 1221*	D 920	E 3030°	F 212	F 7011*
A 720	A 1040°	B 322	F 2001*	D 911	E 1031°	F 213	C 1020*
A 730	A 5040°	B 420	B 1310*	D 912	E 3030°	F 216	C 4060*
A 740	A 5540°	B 510	F 2002*	D 931	E 3130°	F 224	C 2120*
A 750	A 6040°	B 520	F 2002*	D 932	E 3130°	F 311	F 1012*
A 760	A 3040°	B 610	B 1410*	D 933	E 3122*	F 430	D 1010*
A 770	A 4040°	B 620	B 1410*	D 951	F 8051*	F 440	D 2310°
A 810	A 2045°	B 625	B 1410*	D 952	F 8052*	F 450	D 3310°
A 820	A 1045°	D 110	B 2210°	D 953	F 8053*	F 431	D 1050*
A 830	A 5045°	D 120	B 2310°	D 962	F 8002*	F 441	D 2350°
A 840	A 5545°	D 130	B 2110*	D 964	F 8003*	F 451	D 3350°
A 850	A 6045*	D 111	B 2250*	D 971	F 2051*	F 460	D 3111*
						F 901	F 2052*

\* dargestellt in Skizze  
 ° Boden Code-Ziffer 99. .  
 ° Deckel Code-Ziffer . . 99

\* present in Sketch  
 ° bottom code digit 99. .  
 ° top code digit . . 99

\* représentation graphique  
 ° fond: chiffres du Code 99. .  
 ° dessus: chiffres Code . . 99

4.2. FFI → New ECMA Code

(FFI = Fachverband Faltschachtel-Industrie, Germany)

FFI (Fachverband Faltschachtel-Industrie) → NEW ECMA CODE								
FFI		ECMA NEW	FFI		ECMA NEW	FFI		ECMA NEW
Blatt	Nr.		Blatt	Nr.		Blatt	Nr.	
1	A 1120	A 2320	17	S 480	F 2032*	37	S 750	C 4010*
2	A 601	A 2056	17	S 490	F 2033*	37	S 760	F 3021*
2	S 110	B 3353*	18	S 600	B 4011*/53	37	S 770	F 3022*
2	S 120	F 1081*	18	S 610	B 4011*/53	38	S 1010	F 7002*
3	A 220a	X 2030*	18	S 630	F 6005*	38	S 1020	F 2035*
3	S 130	X 2020*	18	S 640	B 4011*/60	38	B 1550	F 2001*
3	S 140	X 2041*	19	S 680	B 4110*/60	39	S 1050	C 2210*
3	S 150	X 1010*	20	S 690	F 2043*	42	S 1150	E 5055*
4	S 170	A 5050	20	S 695	F 2041*	42	S 1160	E 5155*
4	A 1010	F 1021*	20	S 700	F 2042*	43	S 1200	E 1021*
5	A 450	F 1023*	21	S 360	F 2011*	43	S 1210	E 1140*
6	A 1110	F 1032*	21	S 370	F 2034*	43	S 1220	E 1020*
6	A 1120	F 1033*	22	S 1450	F 8011*	43	S 1230	E 1420*
6	A 1140	F 1035*	22	S 1460	F 8012*	44	S 1250	E 3120*
6	S 180	F 1031*	22	A 1010	F 8013*	44	S 1270	E 2220*
7	A 1310	X 4011*	22	A 1620	F 8013*	45	S 1310	E 2220*
7	A 1320	X 4031*	22	A 1630	F 8013*	45	S 1320	E 2320*
7	A 1350	X 4021*	23	S 510	B 3310*/53	45	S 1330	E 2222*
7	A 1360	X 4022*	23	S 520	B 3410*/50	45	S 1345	F 5011*
7	S 210	X 4024*	23	S 530	B 3310/53	46	S 1410	E 2110*
8	S 250	F 6016*	24	S 560	B 4110*/50	46	S 1430	E 1011*
8	S 260	F 6015*	24	S 570	F 2051*	47	S 1510	E 1540*
8	S 270	F 6015*	24	S 580	B 4110*/50	47	S 1520	F 5004*
9	S 300	F 6004*	24	S 590	X 1040*	47	S 1530	F 5002*
9	S 280	F 6021*	28	S 710	B 1221*	47	S 1540	F 5001*
10	A 1120	A 2220*	32	F 218	C 4080*	47	S 1550	F 5003*
12	A 1400	F 1034*	33	S 800	D 3350	50	S 1610	B 3510*
15	S 400	B 3210*/50	33	S 820	D 6310*	51	S 1670	B 4910*
15	S 410	B 3410*/50	34	S 850	D 5010*/50	53	B 650	B 1411
15	S 430	B 3210*/50	34	S 870	D 5110*/50	55	S 1720	F 4061*
16	S 440	B 4150*	35	S 910	F 6081*	55	S 1750	D 7311*
16	S 450	B 4410*/50	35	S 920	F 6082*			
16	F 121a	F 2031*	36	S 950	D 3110			
17	S 460	B 4150*	36	S 960	D 4010*			
17	S 470	F 6003*	36	S 970	D 4011*			

\* dargestellt

\* ../99 = mit Deckelvariante

\* represented in sketch

../99 = incl. cover/lid

«Bobst, British Printing, Folding Carton Style Nomenclatura, GIFASP, Jagenberg etc.»:

Notice: A number of other current catalogues show styles that also can be found in the ECMA Code: See introduction 2.4., 3rd way for reference.

Hinweis: Einige andere Verzeichnisse für Faltschachteln zeigen Typen, die auch im ECMA Code vorkommen: Siehe Einführung 2.4., 3) für Referenz.

4.4. List of national ECMA-Partners (by countries)  
Verzeichnis der ECMA-Mitgliedsverbände nach Ländern

## Secretariats

Country	National Association	Address
Austria	Verband der Faltschachtelindustrie	Brucknerstrasse 8 A-1041 VIENNA  tel. +43-1-505 53 82-0 fax +43-1-505 90 18  Mr. R. Bergolth
Belgium	ECMABEL (FETRA)	715, Chaussée de Waterloo B.25A B-1180 BRUSSELS  tel. +32-2-343 64 74 fax +32-2-344 86 61  Mr. J. Cardon
Czech Republic	SYBA Packaging Association	Lipova 15 CZ-120 00 PRAGUE 2  tel. +420-224-919 529 fax +420-224-919 591  Mr. V. Volek
Denmark	Emballage Industrien	Nørre Voldgade 48,1 DK-1358 COPENHAGEN K  tel. +45-33-91 38 00 fax +45-33-91 96 01  Mr. P. Huntley
France	Fédération Française du Cartonnage	15, Rue de l'Abbé Grégoire F-75006 PARIS  tel. +33-1-45 44 13 37 fax +33-1-45 48 44 74  Mr. D. Blondiaux
Germany	Fachverband Faltschachtel Industrie eV	Lyoner Straße 14 D-60528 FRANKFURT AM MAIN  tel. +49-69-89 01 2-0 fax +49-69-89 01 2-2 22  Mr. C. Schiffers
Italy	Assografici Gifasp	Piazza Conciliazione 1 I-20123 MILANO MI  tel. +39-02-49 81 051 fax +39-02-48 16 947  Mr. G. Bianchini

Netherlands	ECMA Nederland	Laan Copes van Cattenburch 79 NL-2585 EW The Hague  tel. +31-70-312 39 11 fax +31-70-363 63 48  Mr. T. Zevenbergen
Spain	ASPACK	Carretera del Plantio, 104.1 A E-28220 MAJADAHONDA – MADRID  tel. +34-91-307 74 44 fax +34-91-307 76 08  Mr. P. Serrano
Sweden	Grafiska Företagens Förbund	Södra Hamngatan 53 Box 404 SE-401 26 GOTHENBURG  tel. +46-316 294 23 fax +46-318 027 54  Mr. D. Wennergren
Switzerland	Swisscarton	Bergstrasse 110 CH-8032 ZÜRICH  tel. +41-44-266 99 32 fax +41-1-266 99 49  Mrs. B. Kraus
	Vereinigung Kartonverpackung Schweiz	Schosshaldenstrasse 20 CH-3006 BERN  tel. +41-31-351 15 11 fax +41-31-352 37 38  Mr. R. Gerber
Turkey	KASAD	Atatürk Organize San. Bölgesi Istasyon Mah. Mustafa Inan Cad. No. 41 TR-34555 Hadimköy / Istanbul  tel. +90-212-771 46 06 fax +90-212-771 46 26  Mr. D. Acemyan
United Kingdom	British Printing Industries Federation	Farringdon Point 29-35 Farringdon Road EC1M 3JF LONDON  tel. +44-20-79 15 83 00 fax +44-20-74 05 77 84  Mr. M. Hopkins

- 4.5. **Reply Card for your suggestions to the New ECMA-Code**  
(see also Fax Nr. on introduction page)
- 4.5. **Antwortkarte für Änderungswünsche**  
(vgl. auch Fax-Nr. in der Einleitung)
- 4.5. **Carte-réponse pour vos remarques concernant cette édition du Nouveau Code ECMA**  
(voir No. de Fax à la première page de l'introduction)
- 4.5. **Carta de respuestas para sus sugerencias sobre el Nuevo Código ECMA**  
(ver No de fax en la primera página de introducción)
- 4.5. **Formulario-risposta per proposte di modifica del presente Codice**  
(v. anche numero di Fax in prima pagina dell'introduzione)

• The Code Committee kindly asks you to transmit your remarks **as soon as possible** to the fax address at ECMA Secretariate, NL-2585 EW The Haag (+3170 363 6348).

**Modification for New ECMA Code:**

Groupe/Gruppe: \_\_\_\_\_ (Text) \_\_\_\_\_  
New/Neue \_\_\_\_\_  
Code No: \_\_\_\_\_  
Page/Seite: \_\_\_\_\_

Company: \_\_\_\_\_  
Maison: \_\_\_\_\_

Address: street \_\_\_\_\_  
Address: rue \_\_\_\_\_

Postcode/City: \_\_\_\_\_ / \_\_\_\_\_  
Code postale/Lieu: \_\_\_\_\_

Your Name: \_\_\_\_\_  
Votre nom: \_\_\_\_\_

Date: \_\_\_\_\_ Signature: \_\_\_\_\_

Tel.: \_\_\_\_\_ Fax: \_\_\_\_\_

- 4.6. Order form for more copies of the ECMA Code
- 4.6. Bestellformular für weitere Exemplare des ECMA Codes
- 4.6. Carte de commande pour des copies du Code ECMA
- 4.6. Boletín de pedido para copias del Código ECMA
- 4.6. Formulario di ordinazione per altri esemplari del codice ECMA

Price € 40,00 excl. shipping cost per copy

**Payment**

Please send me an invoice  
*Please note that for orders/invoices with a total amount below € 200,00 we can only send you a copy of the book after receipt of your payment*

Please charge our credit card  
Credit card company:  VISA  Euro/Mastercard  
 AMEX  Diner's Club

Credit Card number: \_\_\_\_\_  
Expiry date: \_\_\_\_\_  
Name Card Holder: \_\_\_\_\_

Please send ..... copies of the ECMA Code to

Company \_\_\_\_\_

Company VAT number \_\_\_\_\_

(for companies outside The Netherlands: if VAT number is not mentioned, we will have to charge 19% VAT)

Name Contactperson \_\_\_\_\_

Postal code and city \_\_\_\_\_

Country \_\_\_\_\_

Telephone number \_\_\_\_\_

Fax number \_\_\_\_\_

Email address \_\_\_\_\_

Date \_\_\_\_\_

Signature \_\_\_\_\_