

BELGIAN PACKAGING INSTITUTE

Non profit making association

B.P.I.

DATE: Brussels, 5th of October 1994.

REPORT Nr.: SVD/as/G-94.211/1396

SUBJECT: Tests on wooden boxes (4D) intended to be used for the transport of dangerous goods of the packaging group III.

BY ORDER OF: **CLIP-LOK FORESCO N.V.**
Diksmuidestraat 64
2300 TURNHOUT

The use of the boxes is submitted to the autorisation of the competent authority.
(ADR-RID, IMDG, ICAO)


ing. M. WITTEBOLLE
Technical Director


Sabine VAN DAEL
Dangerous Goods Department

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REPORT G-94.211I. Presented packages.

Typ of box : Multiplex wooden box conform the description (4D) as mentioned in the different regulations.

Description of the samples :

Multiplex wooden boxes (dimensions : 719 x 583 x 582 mm), manufactured following the plan nr. TRA 4003A Type 148.

The boxes are foreseen of an inner ring made of double-wall corrugated board and 5 plates with partitions, in which 72 airbags for cars are packed. (see plan)

Each box is closed by means of 24 clips of the type "Clip-Lok" (see specifications) and marked with the logo.

Total weight : 100 kg

Total weight of the sample : 100 kg

Number of received samples :

8 packagings ready for shipment

II. Test programme

Performance tests for wooden boxes (4D) prescribed by :

- UN - Part 9
- IMDG - Annex I - paragraph 8
- ICAO - Part 7 - chapter 4
- ADR-RID - Appendix V (A5)

1. Drop test

Filling material : see point I (inner packaging)

Number of tested packagings : 5

Drop height : 0.8 m

Drop orientation :

first drop :	flat on the top
second drop :	flat on the bottom
third drop :	flat on the longest side
fourth drop :	flat on the shortest side
fifth drop :	on a corner

Criterion

No important deterioration of the box, no loss of the contents.

2. Stacking test

Filling material : see point I (inner packaging)

Number of tested samples : 3

Stacking height : 3 m

Duration of the test : 24 hours

Stacking load :

$$(3000/582) - 1) \times 100 \approx 420 \text{ kg}$$

Criterion

No deteriorations which could adversely affect transport safety.

No distortion liable to reduce the strength of the box or to cause instability in a stack of packages.

III. Results of the tests

1. Drop test

No important deterioration of the box, no loss of the contents.

2. Stacking test

No test sample shows any deterioration which could adversely affect transport safety.

No distortion liable to reduce the strength of the box or to cause instability in a stack of packages.

V. Conclusions

The presented packagings have successfully met the performance tests prescribed for the transport of dangerous goods of the packaging group III and may be used in connection with the following conditions :

- maximal stacking height : 3 m
- maximal total weight : 100 kg

All other conditions of use are not covered by this report.

The packagings may only be used for the transport of dangerous goods by road, rail, sea or air with the agreement of the concerned competent authority.



Sabine VAN DAEL
Dangerous Goods Department

Brussels, the 5th of October 1994.

REPORT G-94.211

The use of the UN mark hereafter, is still submitted to the authorization of the competent authority.


The hereafter mentioned packagings :

- wooden boxes (4D)

that are the subject of report :

- G-94.211 of the 5th of October 1994

may obtain the hereafter mentioned UN mark :

 4D/Z 100/S/* * : year of manufacture
B/CLIE-** **: registration number to be delivered by the authority

as far as the use of the above mentioned packagings in the IMDG, ICAO and ADR-RID prescriptions is provided for.

The stacking test was effectuated for a stacking height of 3 m.

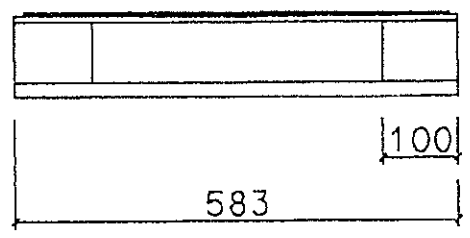
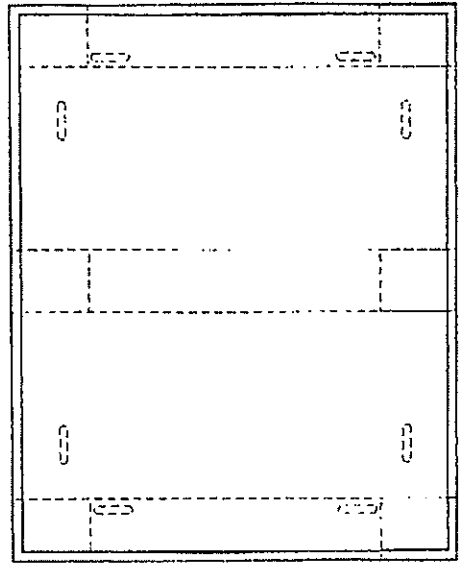
Gross weight : 100 kg

Firm : **CLIP-LOK FORESCO N.V.**
Diksmuidestraat 64

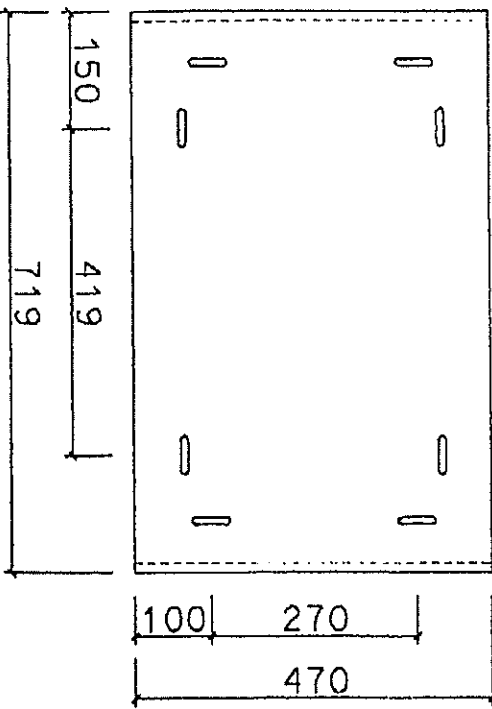
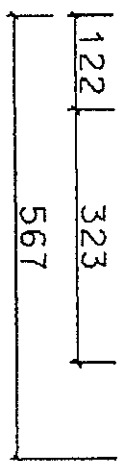
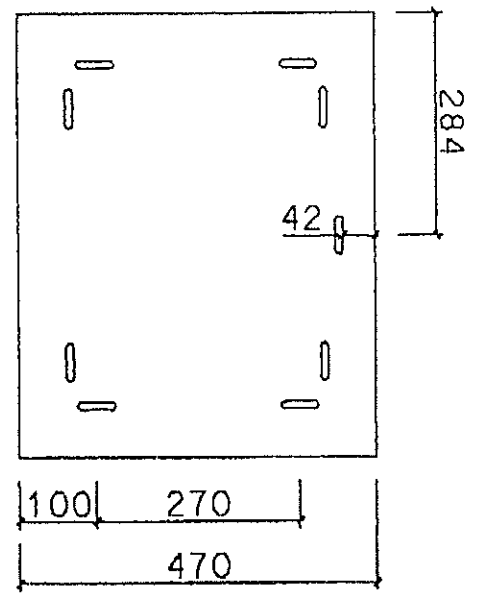
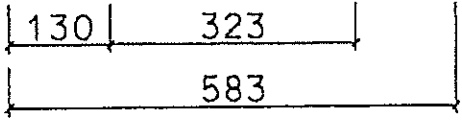
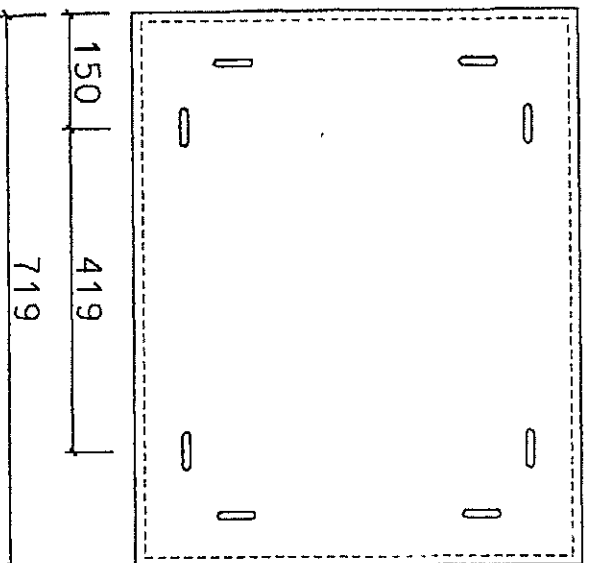
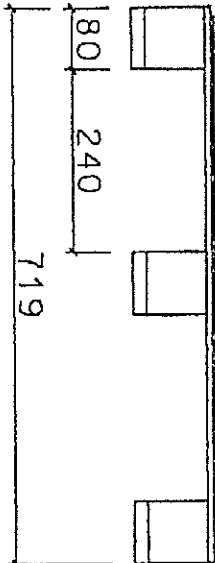
2300 TURNHOUT



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Dangerous Goods Department



12 | 78 | 18



FRITZ NEIDHART GmbH & Co. KG - Holzwerke
 D-82354 Weilheim
 D-26723 Emden

Erstellungsdatum: 10.08.94
 Ausgabe/Vorne:
 Ausgabe/Vorne:
 Kunde: TRM, Altdorf
 Typen N. Kunde / Kommission: 748

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 Diese Zeichnung darf ohne unsere Genehmigung
 weder vervielfältigt, noch zu Zwecken des
 Wettbewerbs verwendet oder dritten Personen
 zugänglich gemacht werden

Seite: 1 Blattzahl: 1
 Name: Mayer
 Messgröße: 96
 Pos. Nr.:
 Auftraggeber: CI-Mehrweg Behälter
 Adresse: 719 X 583 X 582

Vertrieb: CLN
 Kunde: TRW, Alfdorf
 Type: TRA4003A
 Ausgabe: 2/04.08.94
 Bezeichnung.: CL-Mehrweg
 Ausführung: Standard
 Material: Sperrholz
 Zusatzfräsg.: ja
 Ladeklappe: nein
 Veri. Bodenfräsg.: ja
 Kantenbesch.: nein
 Klotzhöhe: 78 mm
 Falzfräsung Höhe: Seite
 Stempel: Clip-Lok Neidhart
 Hinweise:

Stückliste

10.8.94

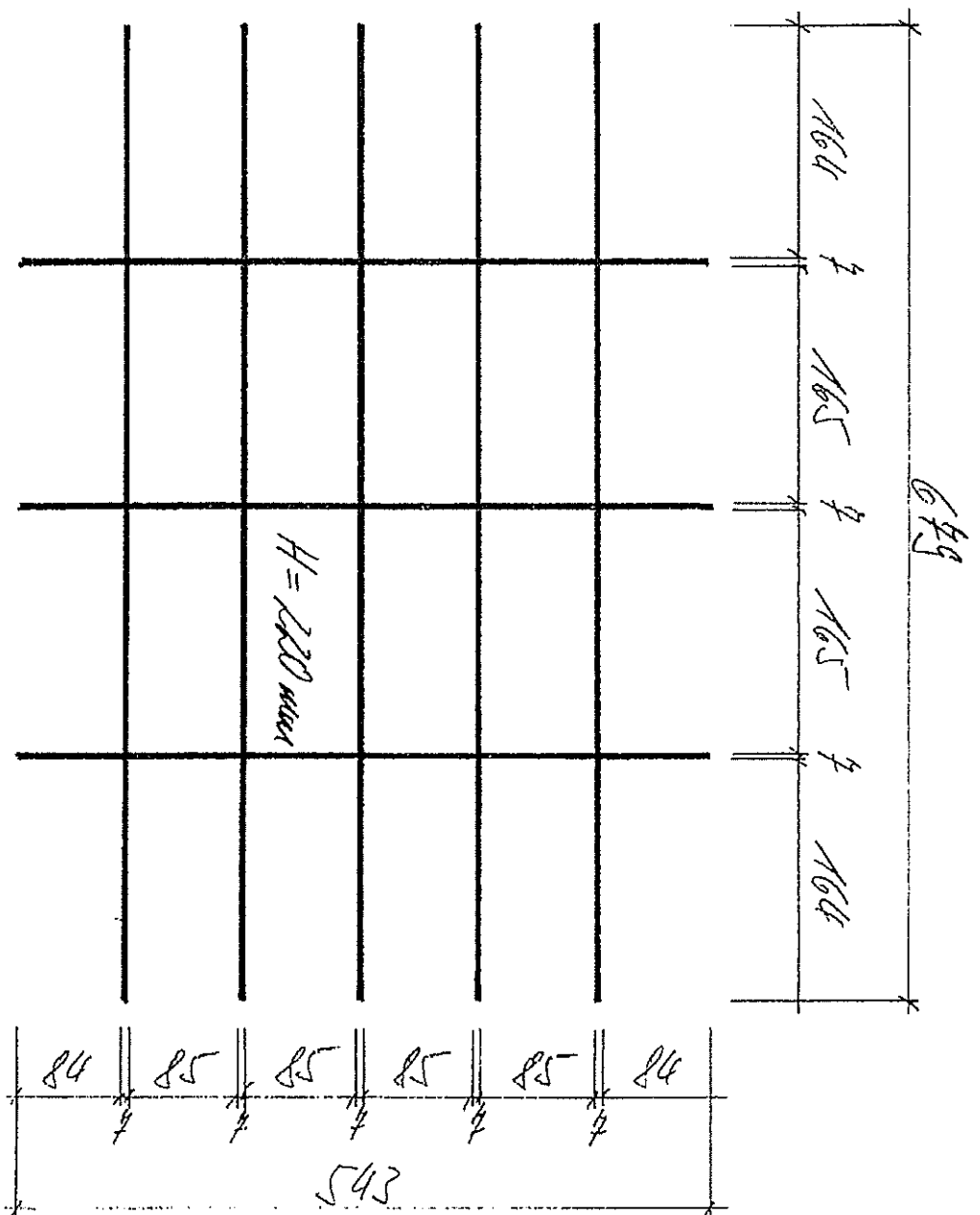
Bestellmenge:
 Eintrefftermin:
 Typ.Nr. Kunde: 148
 Kommission:

			Länge	Breite	Höhe
Bd	FU	Außenm. mm	719	583	582
De	FU	Innenm. mm	695	559	462
Se	FU	Clips	2	2	2
St	FU	Außenfl. qm	2,354		
		Grundfl. qm	0,419		

Plattenformat für Schäftung: 2400 / 1500

Bezeichnung	St.	Fertigmaße mm				Zuschnittmaße mm			Rohmaße mm				Schäft fugen
		Länge	Breite	D	m2/m3	Länge	Breite	m2/m3	Länge	Breite	D	m2/m3	
Boden	1	719	583	12	0,419	735	599	0,440	600	750	12	0,450	0,209
Deckel	1	719	583	12	0,419	735	599	0,440	600	750	12	0,450	
Seiten	2	719	470	12	0,676	735	486	0,714			12	0,753	
Stirn	2	567	470	12	0,533	583	486	0,567	600	500	12	0,600	
Kufenbr. Sp.	3	583	80	18	0,140	583	80	0,140	610	84	18	0,154	
Kufenbr. Sp.													
Sp.-Klotz													
Sp.-Klotz													
Querbr.no.Fi.													
Querbr.no.Fi.													
Kufenbr.n. Fi.													
Hilfsstoffe					kg/St.	Gesamt-kg							
Formsp.Klotz	6	100	80	78	0,374	2,25							
dto.		133	80	78	0,498								
dto.		95	95	78	0,422								
dto.		138	95	78	0,614								
dto.		145	100	78	0,679								
dto.		145	145	78	0,984								
Klammern				32	0,003								
Streifennägel			3,8	80	0,007								
Nagelschr.			4,6	50	0,007								
Nagelschr.	24		4,6	80	0,008	0,19							
5-kt.Schr.			M 8	110	0,044								
6-kt.Schr.			M 8	150	0,055								
Leim					kg								
Clip 12/Std.	24		35	1,4	0,050	1,20							
Clip 18/Std.			50	1,6	0,170								
Summen Spanplatte 12 mm					qm								
Summen Spanplatte 15 mm					qm								
Summen Spanplatte 18 mm					qm								
Summen Sperrholz 12 mm					qm	2,047		2,162				2,253	
Summen Sperrholz 15 mm					qm								
Summen Sperrholz 18 mm					qm	0,140		0,140				0,154	
Summen Massivholz					cbm								
Schäftfugen 12 mm						0,209							
Schäftfugen 15 mm													
Schäftfugen 18 mm													
Zuschnitt Gesamt 12 mm					lfm	4,806							
Zuschnitt Gesamt 15 mm					lfm								
Zuschnitt Gesamt 18 mm					lfm	1,989							
Platten-Kantenfräsung					lfm	4,106							
Schlitzfräsungen Kufenbrett					lfm								
Behältergewicht					kg	17,99							


Versandart:
 Versandanschrift:



pro Cassierer:
 2x Gefache
 5x Zerschweif
 1x Mantel

+ Zerschweif 503 x 649 mm
 mit Griffbock
 + Mantel Typ 0801
 H: 684 x 505 x 1661 mm

Rev. 2.7

	
Fritz Neidhart Holzverarbeitung 8120 Weilheim Oberbayern	
Zeichnungs-Nr.:	
Kastenwort:	Maßstab:
F. Neidhart	MR

ANNEX

