



SOUTH AFRICAN POLICE SERVICE
EXPLOSIVES UNIT
CHIEF INSPECTOR OF EXPLOSIVES

EXPLOSIVES AUTHORISATION CERTIFICATE

CERTIFICATE NUMBER

ZA-X 384

Product Name: **FUZE PDS M0726A1**

Proper Shipping Name: **FUZES, DETONATING with protective features**

SIN/UN Number: **UN 0410**

UN Classification Code: **1.4D**

Packaging Certification: **u 4D/Y15/S/*
n ZA / +AA5791**

Manufacturer: **Rheinmetall Denel Munition (Pty) Ltd, Somerset West,
South Africa.**

References: **Rheinmetall Denel Munition's application dated
9 December 2008**

Date Issued: **22 December 2008**



JJ VAN STADEN

SUPERINTENDENT

CHIEF INSPECTOR OF EXPLOSIVES

JJ VAN STADEN

* Denotes: Year the packaging is manufactured

Classification of an article or substance is based on the guidelines provided in terms of the following:

South African documents:

- Explosives Act (Act no 26 of 1956) and Regulations
- SANS 10228: The identification and classification of dangerous substances and goods

International documents:

- United Nations Recommendations on the Transport of Dangerous Goods - Manual of Tests and Criteria
- United Nations Recommendations on the Transport of Dangerous Goods - Model Regulations
- International Air Transport Association - Dangerous Goods Regulations
- International Maritime Dangerous Goods Code

TEST REPORT

PRODUCT:- Fuze PD M0726A1

NO.05-GB310-6113-0004

TEST TITLE:- Preliminary test of method of packing for airfreight

PHASE:- Design Qualification

DATE: 25 Nov 2008

AUTHOR:- J GOOSEN

APPROVED:

1 INTRODUCTION

There is a requirement to be able to airfreight the fuze PDS M0726A1 to various clients including Junghans in Germany.

Junghans have a qualified packing which enables them to airfreight fuzes. The M0726 fuze is similar, although not entirely identical, to the Junghans fuze and is used on the same rounds.

A method of packing has been devised using a Cliplok box of a similar volume to the German box and containing the same quantity of fuzes.

(75 fuzes packed in 3 layers of 25 fuzes each)

This report details the test done to evaluate the integrity of the box in the unlikely event that the detonator of a fuze functions.

2 METHOD

The box was packed with 74 normal fuzes and one special fuze.

The special fuze was identical to a normal fuze except that it had a hole drilled through the ogive to enable a piece of lead cord to initiate the detonator. The special fuze was placed in the center of the center layer of fuzes.

An 8mm hole was drilled through the side of the box to accommodate the lead cord.

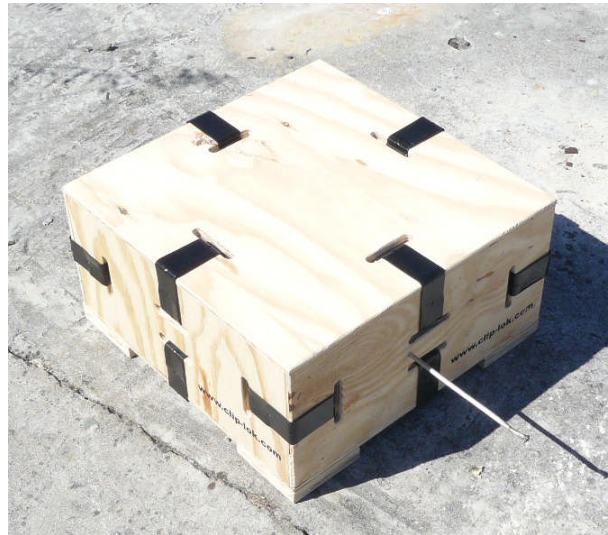
The box was placed on a cement pad and the lead cord was initiated by means of an electric detonator.

3 RESULT

The box remained intact no difference could be seen after functioning. (See pics below)



Before firing



After firing



Top packing piece of top layer after firing



Top layer of fuzes after firing



Middle layer with functioned fuze



Top packing piece of bottom layer



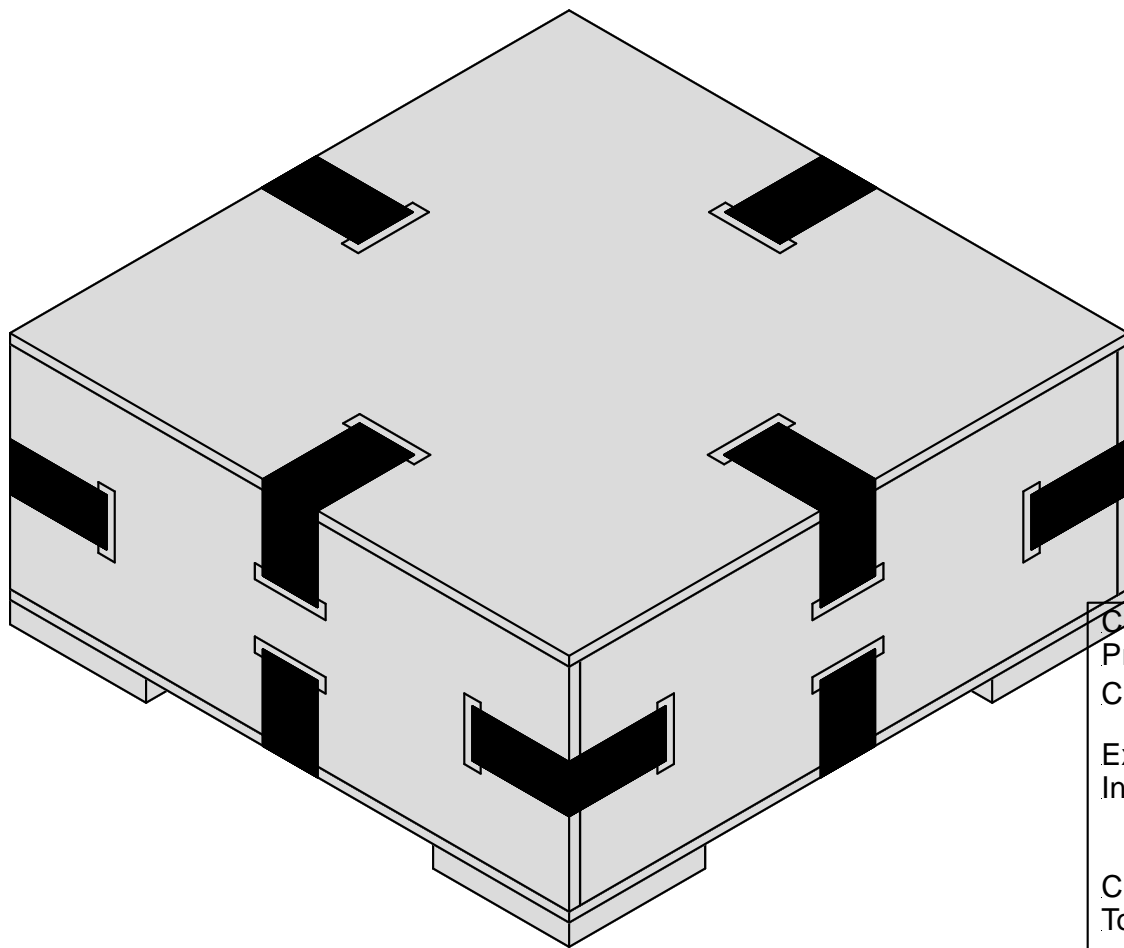
Bottom layer of fuzes

5 CONCLUSION

The entire event was contained in the box and should satisfy the requirements for air freight.

In addition none of the adjacent fuzes showed any evidence of damage as a result of the detonator functioning in the special fuze.

4-WAY ISOMETRIC VIEW
03 February 2010



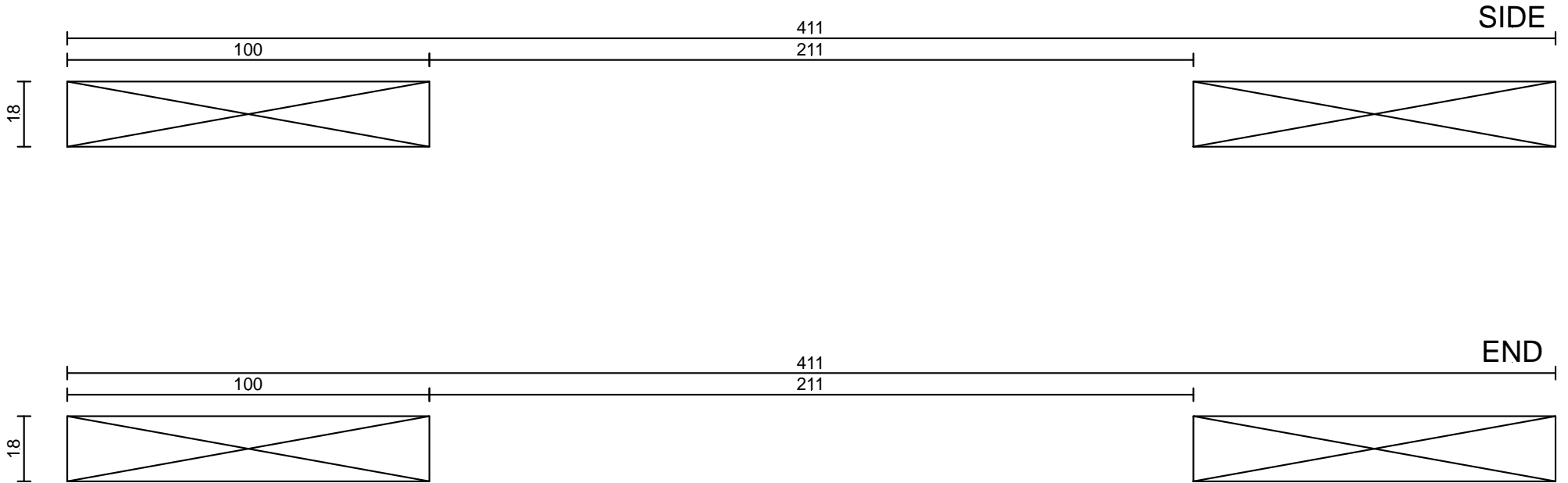
Client name	: Atlantis Corporation
Project code	: Fuse Box
Clip-Lok reference	:
	: L x W x H
External dimensions	: 411 x 411 x 214 mm
Internal dimensions	: 375 x 375 x 160 mm
Clip type	: SMALL
Total nr. of clips	: 12
Pallet type	: FOUR WAY



Clip-Lok International Limited ((4/27/93). This drawing is the property of Clip-Lok International Limited and any copying or dissemination of it without the prior written consent of Clip-Lok International Limited is prohibited. If you are in possession of, copy or disseminate this drawing without proper authority, legal proceedings may be taken against you. Clip-Lok International Limited. phone: fax:

4-WAY PALLET SIDE & END VIEWS

03 February 2010



Client name : Atlantis Corporation
Project Code : Fuse Box
Number of Bearers: 2

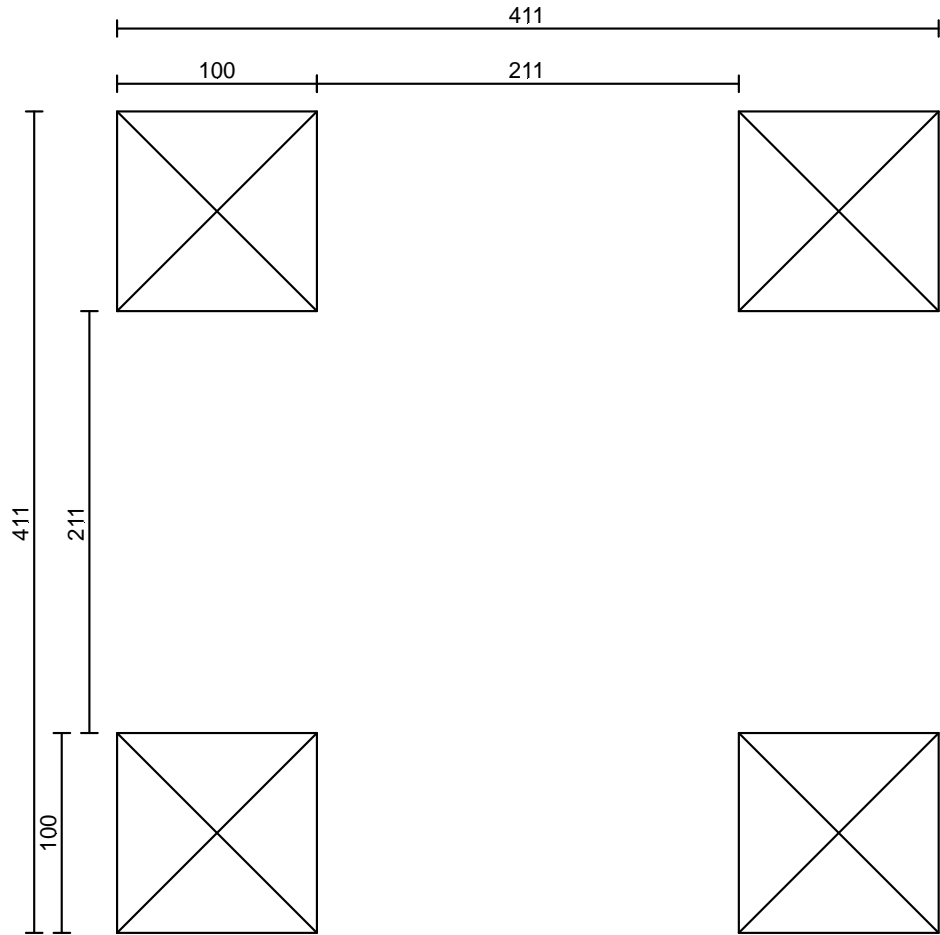
Runner material: <No runners used>
Block material :
Crossmembers : NONE

Handling : ALONG LENGTH
Pallet base height: 36 mm



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4-WAY PALLET - TOP VIEW
03 February 2010

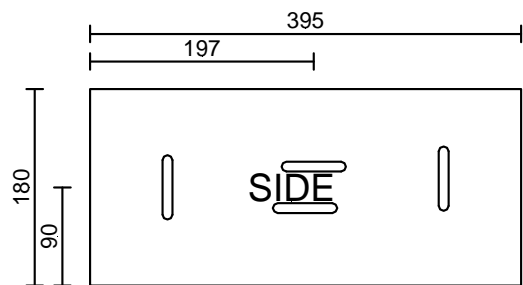
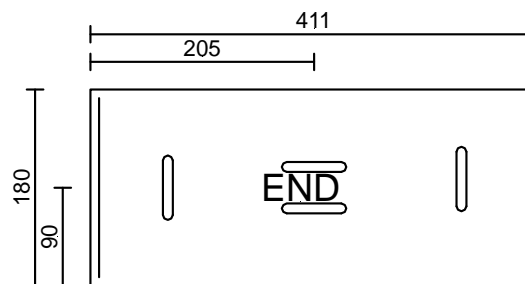
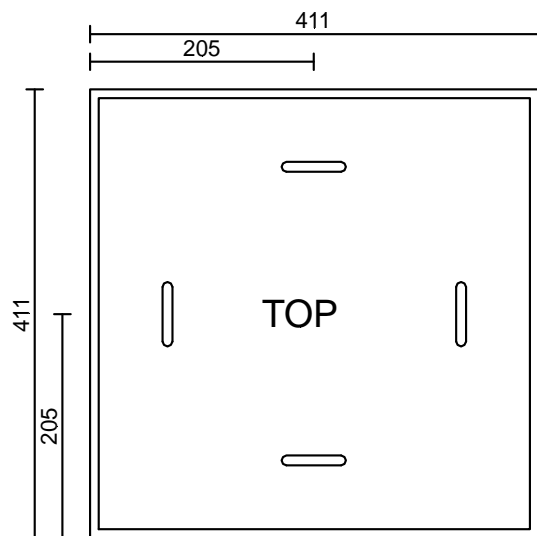


Client name : Atlantis Corporation
Project Code : Fuse Box
Number of Bearers: 2

Runner material: <No runners used>
Block material :
Crossmembers : NONE

Handling : ALONG LENGTH
Pallet base height: 36 mm

ALL PANELS VIEW
03 February 2010



Client name	: Atlantis Corporation
Project code	: Fuse Box
Top material	:
Top thickness	: 18 mm
Side/end material	:
Side/end thickness	: 18 mm
Bottom material	:
Bottom thickness	: 18 mm