



Sinoarmor

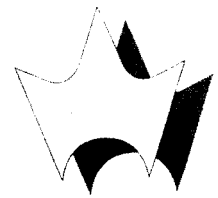
Division Of Concept East Ltd

NIJ IIIA Ballistic Helmet Independent Laboratory Testing

**(For more information on our products, please visit our website
www.sinoarmor.com)**

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27 February 2009
(HPWLI 11069-02A)

Concept East Ltd.
16E Neich Tower
128 Gloucester Road
Wanchai
Hong Kong

Attention: Rob Thompson

Gentlemen:

In accordance with your instructions, H.P. White Laboratory, Inc. conducted ballistic penetration testing of one rigid woven fiber in matrix helmet received 19 February 2009 via Hong Kong Post.

Testing was conducted in accordance with your instructions, and the modified provisions of NIJ-STD-0106.01, BALLISTIC HELMETS, dated December 1981, using caliber .44 Magnum, 240 grain, SWCGC ammunition. The range of fair projectile velocities for these calibers was that specified in NIJ-STD-0108.01, IIIA. The test sample was mounted on a penetration headform positioned 16.5 feet from the muzzle of a test barrel to produce zero degree obliquity impacts with respect to the tangent of the helmet curvature at the point of impact. Photoelectric lumiline screens were positioned at 6.5 and 9.5 feet which, in conjunction with elapsed time counters (chronographs), were used to compute projectile velocities 8.0 feet from the muzzle. Penetrations were determined by visual examination of a 0.020 inch thick sheet of alloy 2024T3 aluminum positioned 5.0 inches behind the interior surface of the helmet. Table I presents a summary of the attached data record.

TABLE I. SUMMARY OF RESULTS

Test Sample			Ballistic Threat				Results
Number	Weight (lb)	Thickness (in) (a)	Caliber	Shots	Velocity(fps) Max. Min		Penetrations
DC4-4	3.36	0.408	.44 Magnum	4	1458	1405	0

(a) Average of four edge thicknesses.

This report is based on data obtained from having tested only the sample submitted, and should NOT be interpreted as an endorsement by H.P. White Laboratory, Inc. of the continuing quality, or performance, of any other items of the same, or similar, design.

The test sample is being returned via Federal Express, or equivalent. Should you have any questions regarding this matter, or if we may be of any further service, please do not hesitate to contact us.

Very truly yours,

H.P. White Laboratory, Inc.

Craig B. Dunn

CBD/tc
Enclosure



H.P. White Laboratory, Inc.

BALLISTIC RESISTANCE TEST

Client : CONCEPT EAST LTD. (HONG KONG)

Job No. : 11069-02

Test Date : 2/20/09

TEST PANEL

Manufacturer : CONCEPT EAST LTD. (HONG KONG)

Size : NA in.

Thicknesses : 0.399, 0.400, 0.418, 0.417 in.

Avg. Thick. : 0.408 in.

Description : RIGID WOVEN POLYETHYLENE FIBR IN MATRIX,
(HELMET)

Sample No. : DC4-4

Weight : 3.36 lbs.

Hardness : NA

Plies/Laminates : NA

Date Rec'd. : 2/19/09

Via : HONG KONG POST

Returned : Federal Express

SET-UP

Shot Spacing : PER NIJ-STD-0106.01

Witness Panel : 0.020", 2024-T3 ALUMINUM

Obliquity : 0 deg.

Backing Material : NA

Conditioning : AMBIENT

Primary Vel. Screens : 6.5 ft., 9.5 ft.

Primary Vel. Location : 8.0 ft. From Muzzle

Residual Vel. Screens : NA

Residual Vel. Location : NA

Range to Target : 16.5 ft.

Target to Wit. : 5.0 in.

Range No. : 5

Temp. : 72 F

BP : 29.56 in. Hg

RH : 23%

Barrel No./Gun : .44 MAG/R5

Gunner : PRATT/ CONTRERAS,

Recorder : GORRERA

AMMUNITION

(1) : .44 MAG SWCGC, 240 gr.

(2) :

(3) :

(4) :

Lot No. : PMC-B44243

Lot No. :

Lot No. :

Lot No. :

APPLICABLE STANDARDS OR PROCEDURES

(1) : NIJ-STD-0106.01 (MODIFIED)

(2) : LEVEL: IIIA

(3) : REQUIRED VELOCITY: 1350-1450 fps.

Shot No.	Ammo.	Time 1 (usec)	Velocity 1 (ft/s)	Time 2 (usec)	Velocity 2 (ft/s)	Avg. Vel. (ft/s)	Penetration	Footnotes
1	1	2131	1408	2139	1403	1405	None	(a)
2	1	2087	1437	2095	1432	1435	None	(b)
3	1	2128	1410	2137	1404	1407	None	(c)
4	1	2054	1461	2062	1455	1458	None	(d)

REMARKS :

FOOTNOTES :

- (a) SHOT IMPACTED IN FRONT OF HELMET.
- (b) SHOT IMPACTED IN BACK OF HELMET.
- (c) SHOT IMPACTED IN RIGHT SIDE OF HELMET.
- (d) SHOT IMPACTED IN LEFT SIDE OF HELMET.