



Sinoarmor

Division Of Concept East Ltd

NIJ IIIA Soft Body Armour Independent Laboratory Testing

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

H.P. WHITE LABORATORY, INC.

3114 Scarboro Road
Street, Maryland 21154-1822
Telephone: 410-383-0516
Facsimile: 410-383-0512
E-mail: info@hpwhite.com
www.hpwhite.com



17 April 2009
(HPWLI 11154-02B)

Concept East Ltd.
16E Neich Tower
128 Gloucester Road
Wanchai, Hong King
China

Attention: Rob Thompson

Gentlemen:

In accordance with your instructions, H.P. White Laboratory, Inc. conducted ballistic penetration testing of one proprietary vest assembly (two panels) received 7 April 2009 via Federal Express.

Testing was conducted in accordance with your instructions, and the abbreviated provisions of NIJ-STD-0101.06, Level IIIA, using caliber .44 Magnum, 240 grain, SJHP ammunition and caliber .357 SIG, 125 grain, TMJ ammunition. The test samples were mounted on an indoor range 17.3 feet from the muzzle of a test barrel to produce zero, thirty, and forty-five degree obliquity impacts. Velocity screens were positioned at 6.5 and 11.5 feet which, in conjunction with elapsed time counters (chronographs), were used to compute projectile velocities 9.0 feet from the muzzle. Table I presents a summary of the attached data records.

TABLE I. SUMMARY OF RESULTS

Test Sample		Ballistic Threat				Results			
Number	Weight (lb)	Obliquity (degrees)	Caliber	Shots	Velocity (fps)		Penetrations	Deformations (mm) (a)	
					Max.	Min.		Max.	Min.
HPW-1	3.15	0	.44 Magnum	4	1449	1428	0	32/27	
		30		1	1416		0	Na	
		45		1	1436		0	Na	
HPW-2	3.43	0	.357 Sig	4	1493	1459	0	20/16	
		30		1	1456		0	Na	
		45		1	1469		0	Na	

(a) Deformation of 5.5 inch clay backing; maximum permissible deformation: 44mm.

This report is based on data obtained from having tested only the samples 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 samples are 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/ps
Enclosures



H.P. White Laboratory, Inc.

BALLISTIC RESISTANCE TEST

Client : CONCEPT EAST LTD

Job No. : 11154-02

Test Date : 4/17/09

TEST PANEL

Manufacturer : CONCEPT EAST LTD

Size : UNKNOWN

Thicknesses : NA

Avg. Thick. : NA

Description : PROPRIETARY
(FRONT PANEL)

Sample No. : HPW-1(44MAG)

Weight : 3.15 lbs.

Hardness : NA

Plies/Laminates : UNKNOWN

Date Rec'd. : 4/07/09

Via : Federal Express

Returned : Federal Express

SET-UP

Shot Spacing : PER NIJ-STD- 0101.06 LEVEL 3A

Witness Panel : CLAY

Obliquity : 0 & 30 & 45 deg.

Backing Material : 5.5" CLAY/PLYWOOD

Conditioning : WET

Primary Vel. Screens : 6.5 ft., 11.5 ft.

Primary Vel. Location : 9.0 ft. From Muzzle

Residual Vel. Screens : NA

Residual Vel. Location : NA

Range to Target : 17.3 ft.

Target to Wit. : 0.0 in.

Range No. : 2

Temp. : 70 F

BP : 29.94 in. Hg

RH : 35%

Barrel No./Gun : .44MAG/R2

Gunner : PAYNE

Recorder : C.HEIL

AMMUNITION

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

(2) :

(3) :

(4) :

Lot No. : SPEER C19P

Lot No. :

Lot No. :

Lot No. :

APPLICABLE STANDARDS OR PROCEDURES

(1) : NIJ-STD-0101.06 LEVEL 3A (ABBREVIATED)

(2) : PRE-TEST CLAY DROPS: 18mm, 17mm, 17mm, 16mm, 17mm

(3) : PRE-TEST CLAY TEMP: 97.6F

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	3444	1452	3459	1446	1449	None	DEF. 27mm
2	1	3487	1434	3498	1429	1432	None	DEF. 27mm
3	1	3493	1431	3510	1425	1428	None	DEF. 32mm
4	1	3476	1438	3490	1433	1436	None	(b)
5	1	3522	1420	3539	1413	1416	None	(a)
6	1	3454	1448	3467	1442	1445	None	

REMARKS :

FOOTNOTES :

- (a) SHOT IMPACTED ON A 30 DEGREE ANGLE
- (b) SHOT IMPACTED ON A 45 DEGREE ANGLE



H.P. White Laboratory, Inc.

BALLISTIC RESISTANCE TEST

Client : CONCEPT EAST LTD

Job No. : 11154-02

Test Date : 4/17/09

TEST PANEL

Manufacturer : CONCEPT EAST LTD
Size : UNKNOWN
Thicknesses : NA
Avg. Thick. : NA
Description : PROPRIETARY
(BACK PANEL)

Sample No. : HPW-2(357SIG)
Weight : 3.43 lbs.
Hardness : NA
Plies/Laminates : UNKNOWN

Date Rec'd. : 4/07/09
Via : Federal Express
Returned : Federal Express

SET-UP

Shot Spacing : PER NIJ-STD- 0101.06 LEVEL 3A
Witness Panel : CLAY
Obliquity : 0 & 30 & 45 deg.
Backing Material : 5.5" CLAY/PLYWOOD
Conditioning : WET

Primary Vel. Screens : 6.5 ft., 11.5 ft.
Primary Vel. Location : 9.0 ft. From Muzzle
Residual Vel. Screens : NA
Residual Vel. Location : NA
Range to Target : 17.3 ft.
Target to Wit. : 0.0 in.

Range No. : 2
Temp. : 70 F
BP : 29.94 in. Hg
RH : 35%
Barrel No./Gun : .357SIG/R2
Gunner : B. WILLIAMSON
Recorder : PAYNE

AMMUNITION

- (1) : .357 SIG TMJ, 125 gr.
- (2) :
- (3) :
- (4) :

Lot No. : SPEER C18P
Lot No. :
Lot No. :
Lot No. :

APPLICABLE STANDARDS OR PROCEDURES

- (1) : NIJ-STD-0101.06 LEVEL 3A (ABBREVIATED)
- (2) : PRE-TEST CLAY DROPS: 18mm, 17mm, 18mm, 17mm, 17mm
- (3) : PRE-TEST CLAY TEMP: 98.4F

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	3348	1493	3359	1489	1491	None	DEF. 16mm
2	1	3344	1495	3353	1491	1493	None	DEF. 20mm
3	1	3425	1460	3427	1459	1459	None	DEF. 18mm
4	1	3434	1456	3436	1455	1456	None	(a)
5	1	3404	1469	3405	1468	1469	None	(b)
6	1	3381	1479	3386	1477	1478	None	

REMARKS :

FOOTNOTES :

- (a) SHOT IMPACTED ON A 30 DEGREE ANGLE
- (b) SHOT IMPACTED ON A 45 DEGREE ANGLE