



BALLISTICRETE
High Impact Plaster

www.gigacrete.com

**Almost no protection at all!
So what is the current solution?**



**How can we protect our families from being shot
right through our walls ?**

Common sights where violence exists



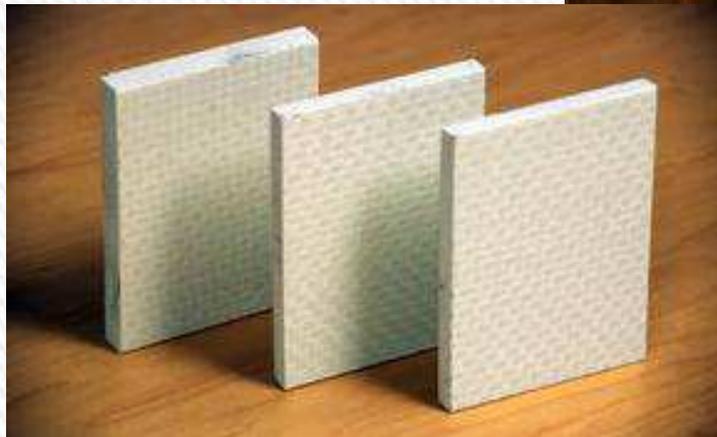
**Cement plaster walls
Do not stop bullets**

**Cement block or
brick walls
Do not stop bullets**



Conventional walls are reinforced with expensive ballistic fiberglass sheets that are heavy, highly combustible and give off toxic smoke and must be protected from sunlight and water.

**Not an ideal solution
in a home.**



Not Repairable

**Time consuming processes,
still needs to be covered**

While a vest can prevent bullet penetration, the vest **and wearer** still absorb the bullet's energy causing blunt force trauma



Once damaged they must be replaced, they cannot be repaired.
Not a solution living in your home!



Bullet resistant windows use thick acrylic sheets that are costly and not repairable



Okay for vehicles and windows, not walls





So what's the solution?

The walls of our homes, our children's schools and places we work are what we live behind, believing they keep us safe...they do not !

How can we change this and be safer.

There is now a very simple solution and it can be applied over our existing walls for less cost than current bullet resistant materials.

It is called BallistiCrete, by GigaCrete in the USA

it is a plaster mixed and applied onsite

it can be used over cement block walls

it can be applied over ordinary gypsum board

it is non toxic, no harmful ingredients

it is a "Green" and sustainable material

it will not support mold or mildew when wet

It is non combustible, no smoke, no flames, no gasses

IT IS EVEN REPAIRABLE

- Easily mixed and applied with conventional plaster and stucco tools



**Mixed and applied on site
To look like ordinary
coatings**



Applications include High Performance Coatings Ideal for Prisons, Schools, Medical buildings, Military, Housing and Retail



What price is a life





**Thin coat applications
5mm thick is tough enough to drive on
even over foam!**



BALLISTICRETE ATTRIBUTES



Bond strength to EPS foam always fails at the foam not the interface

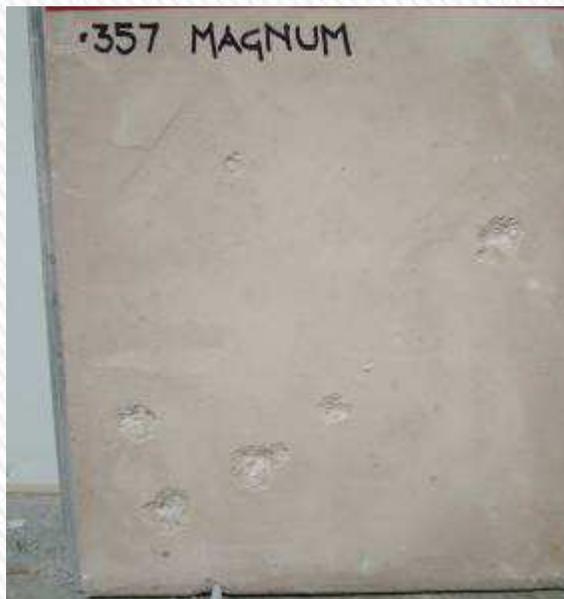
Tensile failure of laminated BALLISTICRETE™ - EPS specimens.

BALLISTICRETE

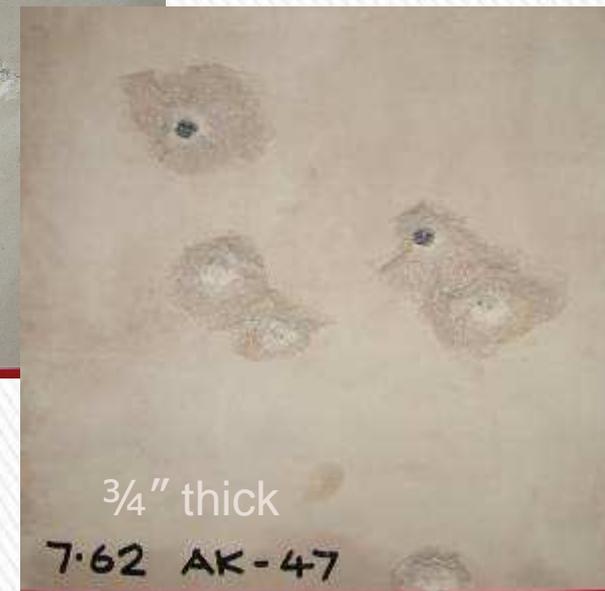


Extreme performance coating where Ballistic levels of protection are required

BALLISTIC RESISTANCE 8,500 to 10,000 PSI (55MPa – 69MPa)



**H.P. WHITE
BALLISTIC LAB TESTED**



**DIRECT APPLIED OVER MANY SUBSTRATES INCLUDING WOOD
FRAMED BUILDINGS, CEMENT BLOCK, BRICK, CONCRETE OR
EXISTING CEMENT BASED STUCCO**



VALUE PERSPECTIVE

Architects, Engineers and Specifiers

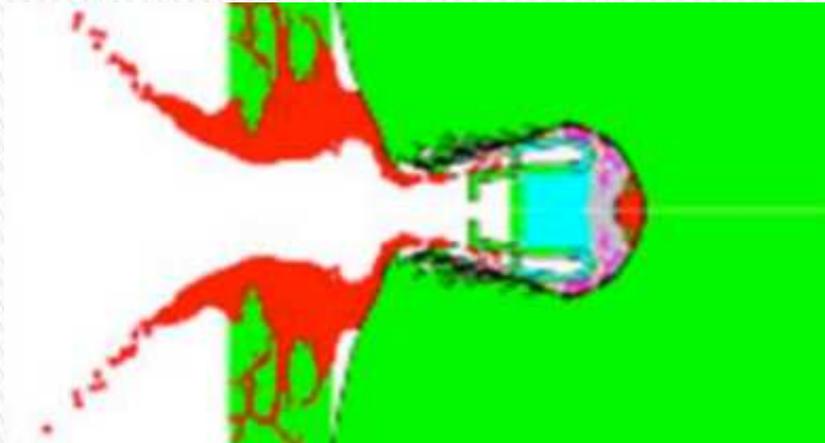
GigaCrete products have passed the following US codes:

- ASTM E C587-04 Bond Strength, Impact Strength, Joint Strength
- ASTM E-84 Fire test (American Standard Testing Methods)
- ASTM C1629-06 Abuse Resistance
- ASTM D4977-03 Adhesion
- ASTM D5420-04 Impact Resistance
- NFPA 286-3 Fire Test (National Fire Protection Agency)
- UBC 26-3 Fire Test (International Building Code)
- Exceeds USEPA (environmental protection agency) no VOC's
- Exceeds stringent California Air Quality Standards
- Will not support mold or Mildew
- No Silica sand used, no added sand on the jobsite
- Utilizes food grade edible and safe materials
- Recognized by LEED and US Green Building Council

BALLISTICRETE



- Protective coatings over a variety of materials typical to ordinary construction
- Thickness of BallistiCrete is determined by advance tests over the local building materials
- GigaCrete Lab will assist in determining the ideal thickness and make recommendations for application methods
- The stronger the substrate being covered, = less thickness is needed.



The goal is to flatten the bullet quickly and catch it in the substrate

TEST PANEL

Manufacturer : SAFE ZONE BALLISTICS	Sample No. : SAMPLE 1	Date Rec'd. : 2/12/10
Size : 16 x 8 x 9 in.	Weight : 81.8 lbs.	Via : Federal Express
Thicknesses : NA	Hardness : NA	Returned : N/A
Avg. Thick. : NA	Fibers/Laminates : NA	
Description : CONCRETE CINDER BLOCK W/ PROPRIETARY COATING		

SET-UP

Shot Spacing : PER CUSTOMER REQUEST	Primary Vel. Screens : 10.0 ft., 20.0 ft.	Range No. : 3
Witness Panel : 0.020", 2024-T3 ALUMINUM	Primary Vel. Location : 15.0 ft. From Muzzle	Temp. : 38 F
Obliquity : 0 deg.	Residual Vel. Screens : NA	BP : 29.87 in. Hg
Backing Material : NA	Residual Vel. Location : NA	RH : 35%
Conditioning : NONE	Range to Target : 25.0 ft.	Barrel No./Gun : 7.62x39
	Target to Wit. : 6.0 in.	Gunner : J. CONTRERAS, MILLETTE
		Recorder : BONSALL

AMMUNITION

(1) : 7.62 x 39mm WIN. FMJ L.C. . 123 gr.	Lot No. : UNKNOWN
(2) :	Lot No. :
(3) :	Lot No. :
(4) :	Lot No. :

APPLICABLE STANDARDS OR PROCEDURES

(1) : PER CUSTOMER REQUEST
 (2) :
 (3) :

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	3981	2512	3977	2514	2513	None	
2	1	3972	2518	3972	2518	2518	None	
3	1	4085	2448	4085	2448	2448	None	

REMARKS :	FOOTNOTES :

Filename : 11443-01 (SAMPLE 1) SAFE ZONE BALLISTICS.Pen

BALLISTICRETE

H.P. WHITE LAB TEST

7.62 X 39 AK-47 Rifle

THICKNESS 3/4" (20MM)

APPLIED OVER CMU BLOCK

SHOT FROM 25FT (8M)

ZERO PENETRATIONS



Front side of a typical 3 coat stucco over OSB and 2x4 wood stud construction with gypsum board on the interior side.

This is typical USA construction and has been shot multiple times with
9mm (3)
.40 cal. (3)
.357 Magnum (3)
.44 Magnum (3)
AK-47 7.62 cal (3)
Uzi automatic machine gun (30)
Desert Eagle .50 caliber (1)



Backside of the same wall, not even a crack or bulge in BallistiCrete.

No visible damage at all.



AK-47 bullet inside the wall after hitting BallistiCrete



**Typical American Portland Cement based 3 coat stucco
Over cement block construction, AK-47 shots**



AK-47 exit hole on cement block, note the hole straight through.

5 hammer hits punch through cement blocks



**15 hammer hits barely leave a
mark BallistiCrete leaving no
cracks at all and easily patched.**

Conclusion:

Lives can be saved by simply adding Ballistic level coatings to almost any wall surface.

BallistiCrete can stop

- 9mm
- .40 caliber
- UZI machine gun fire
- .357 magnum
- .44 magnum
- 7.62 AK-47 rifle
- Desert Eagle .50 caliber



BALLISTICRETE

Providing GREEN technology solutions around the World.

www.gigacrete.com