PROTECTION AGAINST EVERY CONCEIVABLE RISK OF ARMED ATTACK

Where transparent armour is a requisite component of your defence strategy, Emirates Glass has a solution. We aim to provide our clients with the ultimate life protection in transparent armour.

Emirates Glass LLC manufactures glass that withstands a wide range of weapon threats, from small hand-guns to high-powered rifles and shotguns. While it maintains the same look and transparency of normal glass, **ARMOUR LITE** is configured to such a thickness that makes it impenetrable in high- risk situations.

Emirates Glass' extensive capabilities extend to a vast range of ARMOUR LITE that can be customized to meet specific requirements, no matter how complex the design. **ARMOUR LITE** glass is made by laminating multiple layers and interlayers of glass under heat and pressure, which binds them permanently into one impenetrable panel. **ARMOUR LITE** can be customized by adding tinting, reflective coating and one-way mirrors, and can also be configured to a desired curvature.

ARMOUR LITE Glass can be used in a wide variety of applications including:

1. **Architectural:** commercial, retail and government buildings
2. **Automotive:** VIP commercial and government cars, armoured military and cash transit vehicles

Dubai Investments

A Subsidiary of

INTERNATIONAL CERTIFICATIONS

Safety and security are at the forefront of everything Emirates Glass does. That is why it is meticulous about ensuring all glass products adhere to the most stringent of global standards and code of practice.

Emirates Glass has an impressive portfolio of certifications that allow it to compete on an international and national level. All products are designed to comply with rigorous international codes of practice for glass security and protection

TNO Innovation for life

Test report

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GLASS AND GLAZING FEDERATION

ARE PROUD TO CONFIRM THAT

Lumiglass Industries llc

HAS SUCCESSFULLY IMPLEMENTED A FACTORY PRODUCTION CONTROL SYSTEM IN ACCORDANCE WITH THE APPLICABLE HARMONISED EUROPEAN STANDARD, HAS COMPLETED THE REQUIRED INITIAL TYPE TESTING AND HAS PREPARED ALL THE APPROPRIATE PAPERWORK TO ALLOW THEM TO CE MARK THEIR

GLASS IN BUILDING-LAMINATED GLASS AND LAMINATED SAFETY

IN ACCORDANCE WITH EN 14449-2

GGF

Issued: 4 August 2013

Certificate No: 00402

Glass and Glazing Federation

Chief Executive: N. Rees

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الإمارات للزجاج
Emirates Glass

ARMOUR LITE

BUILT TO BE IMPENETRABLE

www.emiratesglass.com

GLOBAL SEAL OF APPROVAL

DCD CERTIFICATION 1

Emirates Glass' tempered and laminated safety products are tested and certified to be 'safe' with stamp of approval obtained from Dubai Civil Defence. This certification is based on independent assessment, process audits and product testing conducted by M/s Thomas Bell Wright on behalf of Dubai Civil Defence. All the products tested passed Drop Height Class 'A' which is the highest impact classification level as stipulated in the safety glazing standard ANSI Z97.1. With this certification, Emirates Glass becomes the only glass processing company in UAE to be registered with Dubai Civil Defence for their safety glazed products.

CE CERTIFICATION 2

Emirates Glass has successfully achieved the prestigious CE Certification on all its laminated and safety glass products. This top European classification gives Emirates Glass full regulatory approval to compete in the European market, thus expanding its global reach. The CE mark and label certification, in accordance with EN14449-2, is testament to the companies strong commitment and maintaining the highest safety and manufacturing standards at all times. This level of certification is only awarded to company who continuously apply rigorous testing, factory production control and auditing across its entire range, to ensure all products meet the certification's quality requirements.

NATO STANAG 4569 & EN1063 3

Certified under internationally recognized armour glass certification for ballistic protection, NATO STANAG 4569 and EN1063 for security glazing in armoured vehicles and structures falls under the U.S. National Institute of Justice Standard for Ballistic Resistant Protective materials, NIJ 0108.01. also covered by the United Kingdom Accreditation Service (UKAS) certification for its improved bullet resistant product line.

BRITISH/ AUSTRALIA/ NEW ZEALAND 4

Armour Lite is manufactured to American ANZI Z 97.1. It meets British Standards BS 6206 that also adheres to Australia and New Zealand.

BULLET PROOF STANDARDS

Select your required resistance level from the schedule of standards opposite. This schedule is not fully comprehensive, so if you desire an alternative International Standard or an alternative weapon/caliber please discuss this with your Emirates Glass representative.

WEAPON	TYPES			STANDARDS				TEST CONDITIONS			CARTRIDGE
	WEAPON	CALIBRE	AMMUNITION	EN1063	NIJ	VPAM	STANAG	MASS (g)	VELOCITY (m/s)	ENERGY (joule)	
	.22 LONG RIFFILE	.22 LR	L/RN	BR 1	I,IIA	VR 1	-	2.6 g	360 +/- 10	168	
	HANDGUN 9 MM	9 mm Luger	FMJ/RN/SC	-	-	VR 2	-	8 g	415 +/- 10	518	
	HANDGUN 9 MM	9 mm Luger	FMJ/RN/SC	BR 2	IIIA	VR 3	-	8g	415 +/- 10	6879	
	HANDGUN .357	.357 Magnum	FMJ/CB/SC	BR 3	II	VR 4	-	10 g	430 +/- 10	943	
	HANDGUN .357 HANDGUN .44	.357 Magnum .44 Rem.Magnum	FMJ/CB/SC FMJ/FN/SC	BR 4	IIIA	-	-	10g 5 g	430 +/- 10 440 +/- 10	943 1510	
	HANDGUN .357	.357 Magnum	.FMs/CB	-	-	VR 5	-	7g	560 +/- 10	1194	
	SHOTGUN (1 SCHOT)	12/70 Brenneke	Loden Kogel 31g	SG 1	-	-	-	31g	420 +/- 10	2734	
	SHOTGUN (3 SCHOTEN)	12/70 Brenneke	Loden Kogel 31g	SG 2	IIIA	-	-	31g	420 +/- 10	2734	
	AK47 KALASHNIKOV SOFT CORE	7.62 x 39	FMJ/PB/FeC	-	-	VR 6	-	8g	720 +/- 10	2074	
	RIFLE 7.62 X 51 SOFT CORE	5.56 x 45	FMJ/PB/SCP1	BR 5	III	VR 7	1	4g	950 +/- 10	1805	
	AK47 KALASHNIKOV SOFT CORE	5.56 x 45 7.62 x 51	FMJ/PB/SCP1 FMJ/PB/SC	BR 6	III	VR 7	-	4g 9.5g	950 +/- 10 830 +/- 10	1805 3289	
	AK47 KALASHNIKOV ARMOR PIERCING	7.62 x 39	FMJ/PB/HCI	-	-	VR 8	2	7.7g	740 +/- 10	2108	
	RIFILE 7.62 X 51 ARMOR PIERCING	7.62 x 51	FMJ/PB/HCI	BR 7	IV	VR 9	-	9.7g	820 +/- 10	3261	
	RIFILE 7.62 X 54 ARMOR PIERCING	7.62 x 54 R	FMJ/PB/HCI	-	-	VR 10	3	12.7g	810 +/- 10	4166	
	RIFILE 7.62 X 51 ARMOR PIERCING	7.62 X 51	FMJ/PB/HCI	-	-	VR 11	3	8.4g	930 +/- 10	3633	
	HEAVY MACHINE GUN ANTI TANK ARMOR PIERCING	14.5 x 114	FMJ/PB/HCI	-	-	VR 14	4	63.4 g	911 +/- 10	26308	