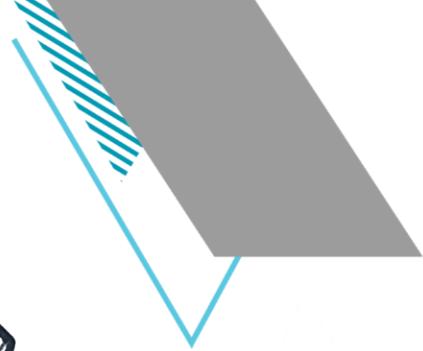
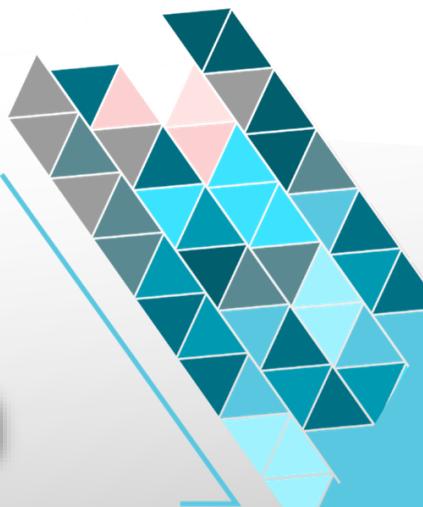




pre -
Qualification



**MODERN
METAL WORKS**

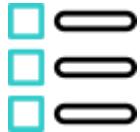


2025



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6. Cooperation letters
7. Our Partners



About Us

MODERN METAL WORKS

is a distinguished manufacturer and installer of premium-quality glass windows, doors, and facades. Equipped with advanced facilities and a highly skilled team, we specialize in delivering tailored glass solutions for residential, commercial, and industrial developments.

Our unwavering commitment to excellence, innovation, and client satisfaction has earned us a strong reputation as a reliable partner within the construction industry.

At MODERN METAL WORKS, we take pride in producing precision-engineered glass products that seamlessly combine aesthetics, durability, and functionality—transforming our clients' vision into reality.

Vision & Missions

Vision

To be recognized as a leading provider of innovative, high-quality aluminum and glazing solutions, setting new benchmarks in design excellence, durability, and customer satisfaction. We aspire to serve as a trusted partner across residential, commercial, and industrial projects by consistently delivering products and services that combine aesthetic appeal with long-lasting performance. Through continuous innovation, advanced technology, and a customer-centric approach, we aim to contribute to the advancement of modern architecture while maintaining the highest standards of quality, safety, and sustainability.

Mission

- Deliver superior aluminum and glazing products and installations that meet the highest industry standards.
- Ensure precision, safety, and efficiency in every project through skilled craftsmanship and advanced technology.
- Foster strong relationships with clients, architects, and contractors through transparency, reliability, and professionalism.
- Continuously improve processes, materials, and workforce capabilities to exceed client expectations.

3-Profile

300 300 300 300 300

Products & Services

Tailored Building Solutions

MODERN provides bespoke building solutions tailored to meet the unique requirements of each project. By working in close collaboration with our partners, we ensure that every façade embodies the perfect balance of functionality, aesthetics, and performance.

High-Performance Façades

We specialize in the design and manufacture of premium glass and aluminum façades that are not only visually striking but also energy-efficient and highly durable. Our products are engineered to withstand the most demanding environmental conditions while maintaining structural integrity and long-lasting visual appeal.

Expert Consultation & Rigorous Testing

At MODERN, we collaborate with architects and engineers to deliver customized solutions that align with specific project and site requirements. Every solution undergoes rigorous testing and quality control to ensure compliance with international standards of performance, safety, and durability.

Products & Services

Aluminium Systems

Bullet Proof Systems

Steel & SS. Systems

Products & Services

Aluminum Systems

Our Aluminum Systems division specializes in the design, fabrication, and installation of high-quality architectural solutions, including **Curtain Walls, Doors, Windows, Skylights, Cladding, and Louvers**.

These systems are engineered to provide **durability, thermal efficiency, aesthetic appeal, and structural performance**, ensuring modern and elegant building façades that meet international standards.

Products & Services

Aluminum Systems

Curtain Wall

Structure Glazing
Frameless Glazing
Partitions
Spider System
Balustrade
Handrails

Doors

Hinged
Sliding
Folding
Smart Hadrwares

Windows

fixed
hinged
sliding
top & bottom hung

Skylights

canopies
domes

Clading

ACP
mashrabiah
louver doors
rolling-up shutters

Louvers

z-shape
pergola
louver doors
rolling-up shutters
flyscreen

Products & Services

Steel & SS. Systems

Our Steel and Stainless-Steel Systems cover the **design, fabrication, and installation** of a wide range of architectural and structural elements, including **Handrails, Cat Ladders, Grill Mesh, Louvers, Pergolas, and Fences**.

All systems are manufactured with **precision, high-quality materials, and corrosion-resistant finishes**, ensuring **strength, safety, and long-lasting performance** for both interior and exterior applications.

Products & Services

Steel & SS. Systems

Handrail	Cat Ladders	Grill mesh	Louvers	pergolas	fence
-----------------	--------------------	-------------------	----------------	-----------------	--------------

Products & Services

Bullet Proof Systems

Our Bullet Proof Systems include a wide range of **high-security products** designed to provide **ballistic protection**, such as **bulletproof glass, doors, and windows**.

These systems are developed and manufactured in collaboration with **leading security solution providers**, ensuring **exceptional protection, reliability, and compliance with international ballistic standards**.

Products & Services

Bullet Proof Systems

BR5

BR5 NS

BR6

BR6 NS

BR7

BR7 NS

Quality Management System

Our Quality Management System ensures every aluminum, glazing, and cladding project meets the highest standards of precision, durability, and safety. We follow strict procedures for material selection, fabrication, and installation, supported by skilled professionals and continuous inspection at every stage. By adhering to international standards and fostering a culture of excellence, we deliver reliable, defect-free, and visually superior results that consistently exceed client expectations.

High Standards – Deliver projects with precision, durability, and safety.

Quality Materials – Source and use only approved, reliable materials.

Skilled Workforce – Employ trained professionals for all stages of work.

Inspection & Control – Conduct checks at fabrication, delivery, and installation.

Compliance – Adhere to international and industry-specific standards.

Continuous Improvement – Regularly review processes to enhance quality.

Management Responsibility

Manage & ensure the success and sustainability of the company through effective leadership, strategic planning, and adherence to the highest standards of quality, safety, and customer satisfaction.

Key responsibilities:

- **Strategic Direction** – Define the company's vision, mission, and objectives, ensuring alignment with market demands and client expectations.
- **Quality Assurance** – Implement and maintain a robust Quality Management System to ensure precision, durability, and compliance with industry standards in all aluminum and glass works.
- **Resource Management** – Allocate and manage resources effectively, including skilled personnel, materials, and technology, to deliver projects on time and within budget.
- **Health, Safety & Environment (HSE)** – Promote a safe work environment by enforcing HSE policies, risk assessments, and preventive measures.
- **Customer Focus** – Build and maintain strong relationships with clients by ensuring clear communication, transparency, and continuous improvement in service delivery.
- **Compliance & Ethics** – Ensure all operations adhere to legal, regulatory, and ethical requirements.
- **Continuous Improvement** – Regularly review performance, identify opportunities for innovation, and invest in staff training and development.

Management Responsibility

Planning

Quality goals are strategically established, progress is continuously monitored, and corrective actions are implemented to enhance the factory's overall performance and production efficiency.

Quality Objectives

To ensure product compliance and customer satisfaction, management emphasizes the importance of setting measurable objectives aligned with the company's quality policy. Progress toward these objectives is reviewed during system evaluations, with necessary actions taken to achieve improvements. New objectives are established as part of the ongoing commitment to continuous enhancement.

Quality Planning

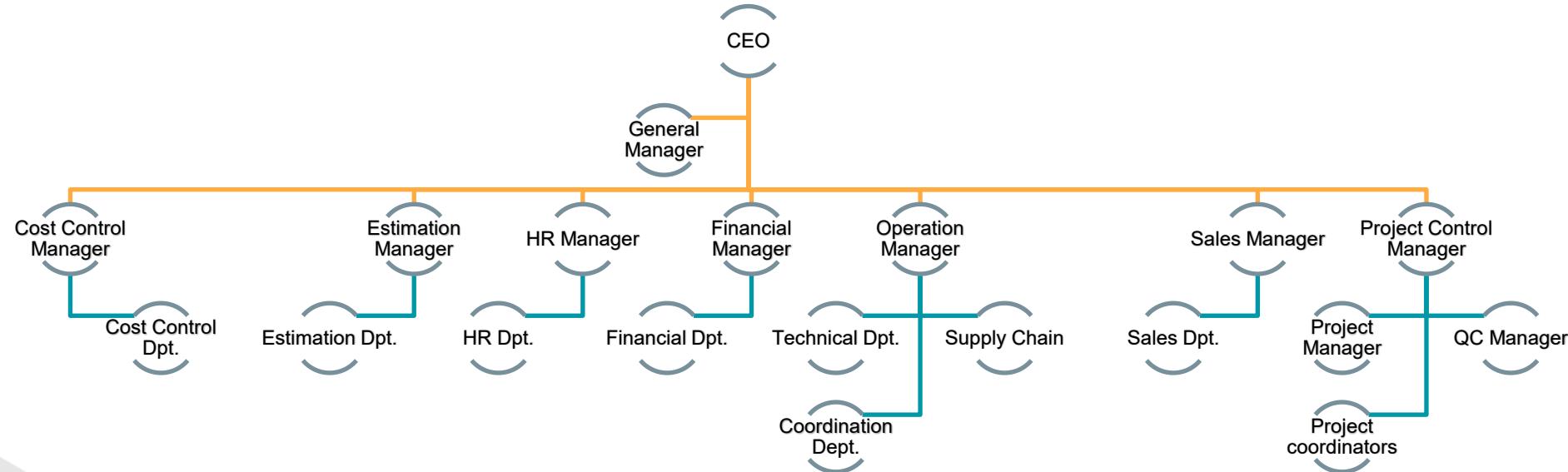
Management identifies and defines the processes and procedures essential for the effective operation of the quality management system. Adequate resources—including technology, machinery, materials, and personnel—are allocated and periodically evaluated to identify potential gaps and implement improvements. Any modifications to the quality system or its processes are carefully controlled and communicated to all relevant personnel within the factory.

Management Responsibility

Health, Safety & Environmental (HSE) Policy

- Ensure a safe, healthy, and well-organized workplace.
- Provide necessary training, instructions, and information to employees.
- Manage materials, equipment, and processes to minimize risks.
- Conduct regular risk assessments and implement preventive measures.
- Comply with all applicable HSE laws and regulations.
- Promote awareness of environmental, health, and safety practices among staff, contractors, and stakeholders.
- Continuously monitor and improve the HSE Management System.

Organization Chart



Our Projects

Project Name: Arena

Client: King Saud University

Main Contractor: SBG

Location: Riyad

Total Area: 13,000 m²

Contract Value: 27,000,000 SAR

Implementation Period: 6 months



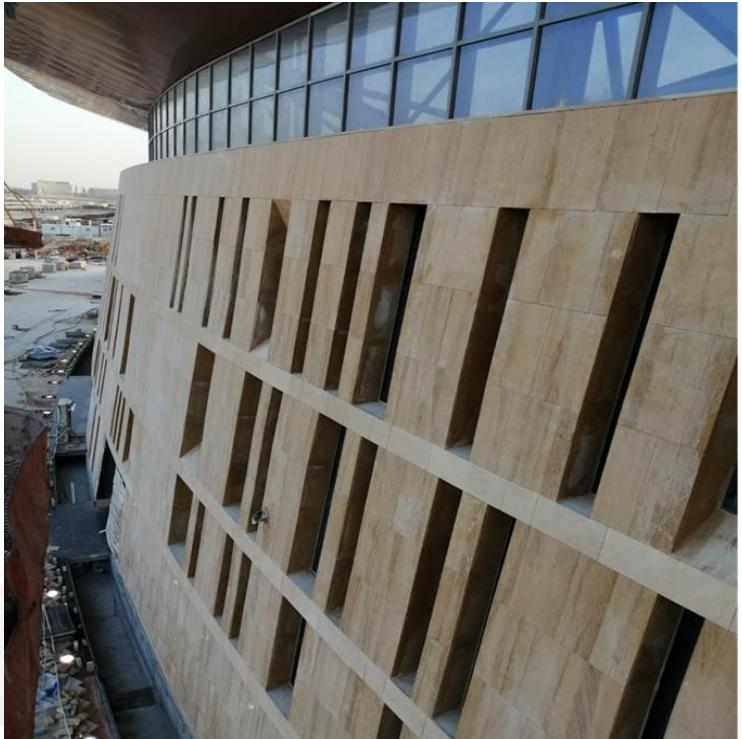
Our Projects

Arena Project



Our Projects

Arena Project



Our Projects

Arena Project



Our Projects

Project Name: Jeddah Promenade

Client: SELA

Main Contractor: MBL

Location: JEDDAH

Total Area: 3300 m²

Contract Value: 24,000,000 SAR

Implementation Period: 2 months (Rush Project)



Our Projects

Jeddah Promenade



Our Projects

Jeddah Promenade



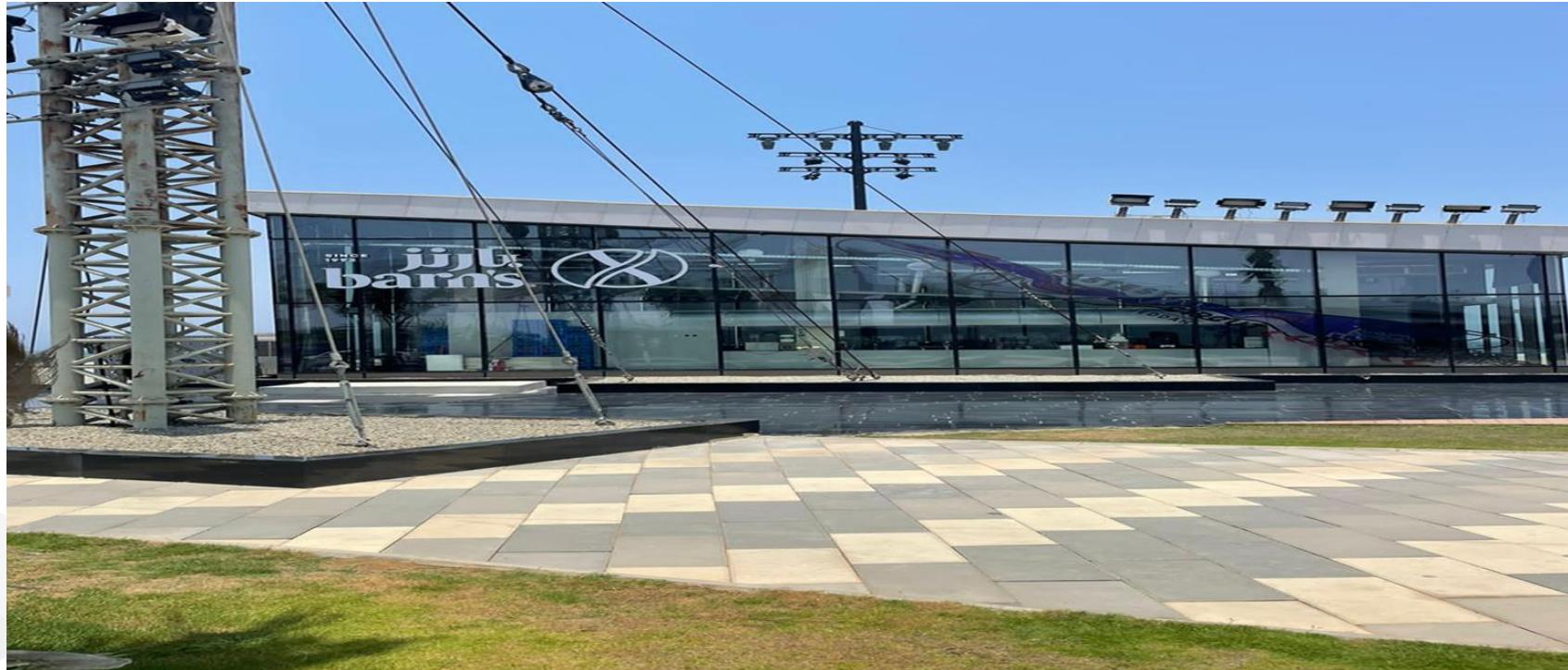
Our Projects

Jeddah Promenade



Our Projects

Jeddah Promenade



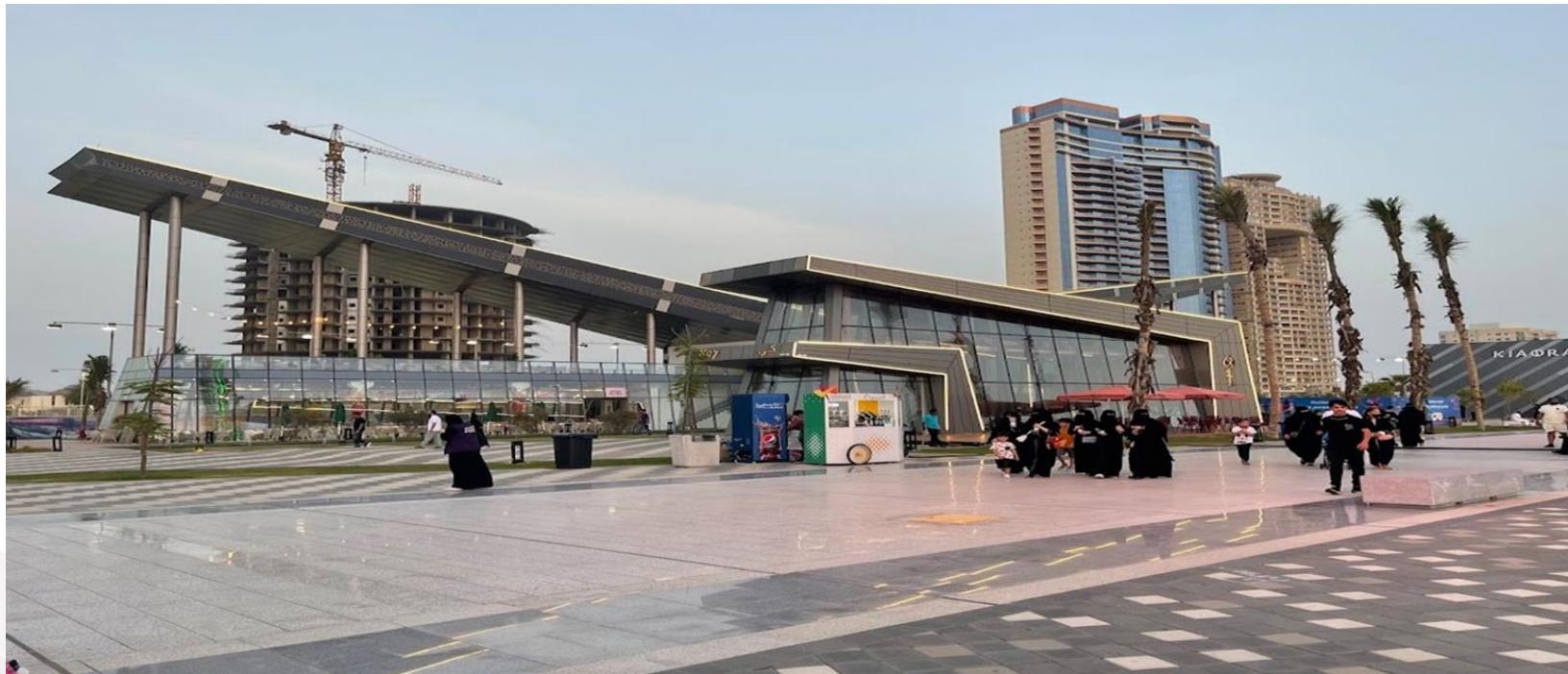
Our Projects

Jeddah Promenade



Our Projects

Jeddah Promenade



Our Projects

Jeddah Promenade



Our Projects

Project Name: NEOM Hospital

Client: NEOM

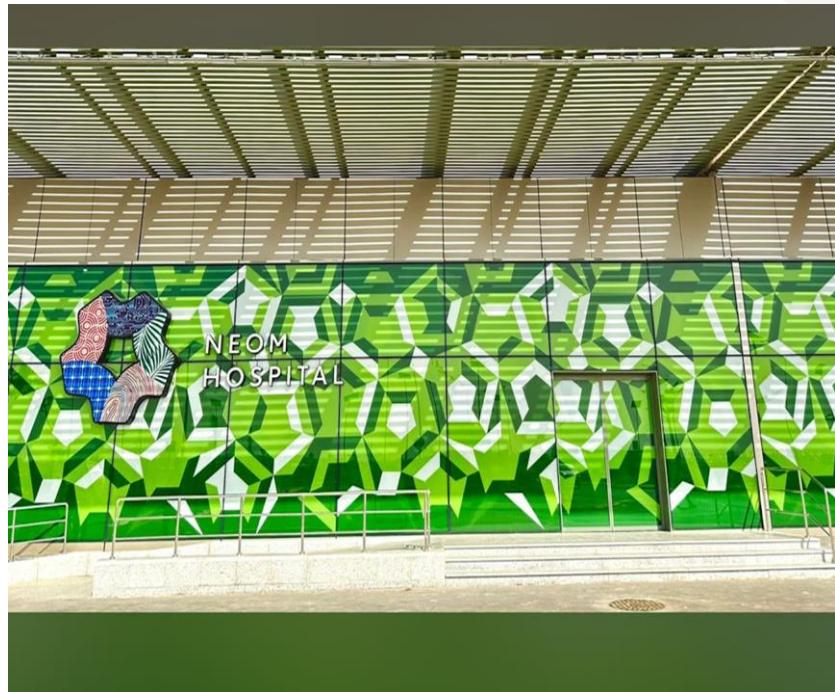
Main Contractor: Al-Bawani

Location: NEOM

Total Area: 4000 m² (including 300 m² bulletproof glass)

Contract Value: 35,000,000 SAR

Implementation Period: 3 months (Rush Project)



Our Projects

NEOM Hospital



Our Projects

NEOM Hospital



Certifications & Licenses





H.P. White Laboratory, Inc.

3114 Scarboro Road | Street, MD 21154 | +1.410.838.6550 | www.hpwhite.com

STANAG 4569 Testing – Test Report

Glass Shield FZ LLC

P.O Box 35410

Ras Al Khaimah

UAE

Attention: Mohammed Abu Taha

Date of report: 2 March 2015

Report prepared by: Ashley Gowland, Customer Operations Coordinator

Report reviewed by: Wesley Mason, Manager of Technical Operations - Hard Armor

Test method and supporting documentation: Per Customer Instructions

Job number: STANAG 4569, Level III – Modified

Job number: 000003907E

Test item receipt date, shipping method, identification information, and inspection results: The sample(s) were received on 26 February 2015 via DHL. Test items were identified as laminated transparencies. The sample(s) were inspected prior to testing and no anomalies were discovered.

Date of testing, test range, and testing performed: Testing commenced at the H.P. White Laboratory, Inc. facilities at 3114 Scarboro Road, Street MD on 2 March 2015. Testing concluded on 2 March 2015; sample(s) will be discarded.

Date testing completed, sample disposal, return shipping method:

Test data transmittal method and storage location: This test report and test data were transmitted via email in a manner compliant with ISO 17025 requirements. Permanent electronic and hardcopy files are maintained in accordance with HPWLL data storage policy on data storage systems, filed by job number.

Revision number and date: NA

Testing was performed on samples provided by the client. H.P. White Laboratory, Inc. holds no responsibility for sample selection methods. This report is based on data obtained from testing 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. This report must not be used by the client to claim product certification, approval, or endorsement by NABL, NIST, or any agency of the Federal Government. This testing was performed by H.P. White Laboratory, Inc. to client specification, and the test results are the property of the client, who holds all rights of reproduction or publication of this report and related test data.

Glass Shield FZ LLC
HPWU 000003907E
2 March 2015
Attention: Mohammed Abu Taha

Test Procedures

Ballistic Resistance Testing: All testing was conducted on an indoor range at ambient conditions in accordance with your instructions and the modified provisions of STANAG 4569. Testing was conducted at threat level III, using caliber 7.62x54R, 155 grain, B32 ammunition. The test sample was positioned 25.0 feet from the muzzle of the barrel to produce zero degree obliquity impacts. Photoelectric infrared screens were located at 10.0 feet and 20.0 feet which, in conjunction with electronic chronographs, were used to compute bullet velocities at 15.0 feet forward of the muzzle. Penetrations was determined by visual examination of the 0.020 inch thick 2024-T3 aluminum alloy witness plate, placed parallel to and at a distance of 6.0 inches behind the test sample. Table I provides a summary of information on the attached data records(s).

Report prepared by:



Ashley Gowland

Ashley Gowland
Customer Operations Coordinator

Report reviewed by:



Wesley Mason

Wesley Mason
Manager of Technical Operations - Hard Armor

Table I: Ballistic Resistance, Summary of Results

Sample Number	Test Sample			Ballistic Threat			Results		
	Thickness (in.) (a)	Weight (lbs.)	Caliber	Obliquity	Shots (b)	Velocity (fps)	Max	Min	Penetrations
HPW-8	3.625	175.86	7.62, B32	0°	3	2777	2740	0	

(a) Based on an average of four corner thicknesses

(b) 3 shots on a 120mm triangle



H.P. White Laboratory, Inc.

BALLISTIC RESISTANCE TEST

TEST PANEL

Manufacturer: GLASS SHIELD FZ LLC.

Size: 19.5 x 19.5 in.

Thicknesses: 3.625, 3.625, 3.625, 3.625 in.

Avg. Thick.: 3.625 in.

Description: 100mm LAMINATED TRANSPARENCY

SET-UP

Shot Spacing : 3 ON A 120mm TRIANGLE

Witness Panel: 0.020", 2024-T3 ALUMINUM

Oblivity: 0 deg.

Backing Material: NA

Conditioning: AMBIENT

AMMUNITION

(1): 7.62 X 54R, B32, 155 gr.

(2):

(3):

(4):

APPLICABLE STANDARDS OR PROCEDURES

(1): STANAG 4569 EDITION 1 (MODIFIED)

(2): LEVEL 3

(3): REQUIRED VELOCITY: 2736-2867 FPS.

Sample No. : HPW-8 (Stanag)

Weight: 175.86 lbs.

Hardness: NA

Piles/Laminates : NA

Date Rec'd.: 2/26/15

Via: DHL

Returned: N/A

Range No.: 3

Temp: 65 F

BP: 30.12 in. Hg

RH: 30%

Barrel No./Gun: R3/7.62 X 54R

Gunner: CHES

Recorder: TRAUTMAN

Primary Vel. Screens : 10.0 ft., 20.0 ft.

Primary Vel. Location: 15.0 ft. From Muzzle

Residual Vel. Screens: NA

Residual Vel. Location: NA

Range to Target: 25.0 ft.

Target to Wit: 6.0 in.

Lot No.: UNKNOWN

Lot No. :

Lot No. :

Lot No. :

Lot No. :

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	3616	2765	3621	2762	2764	None	
2	1	3645	2743	3653	2737	2740	None	
3	1	3599	2779	3603	2775	2777	None	

REMARKS:

FOOTNOTES:



Zertifikat - Certificate

S 21 0068 01 / Z

Durchschusshemmende Verbundsicherheitsverglasung

Bullet resistant laminated glazing

Antragsteller
Applicant

GLASS SOLUTIONS LLC
UAE - RAS AL KHAIMAH

Hersteller
Manufacturer

GLASS SOLUTIONS LLC
UAE - RAS AL KHAIMAH

Ort und Datum der Prüfung
Location and test date (d.m.y.)

89081 Ulm, 12.10.2021

Prüfvorgabe
Test requirement

DIN EN 1063 :2000-01

Gegenstand der Zertifizierung
Item under certification

VSG-Verglasung (+21°C)
Laminated glazing (+21°C)
500 x 500 x 41,60 mm [Istmaße / Actual sizes]
(22,10 kg)

Typenbezeichnung
Product reference

EN 1063 BR6 NS

Zugeordnete Widerstandsklasse
Resistance class achieved

DIN EN 1063 BR6 NS

Details siehe Prüfbericht-Nr.
Details see test report number

S 21 0068 01 / B

Hiermit bestätigen wir, dass sämtliche zur Zertifizierung eingesetzten Prüfmittel, Messmittel und Hilfsmittel entsprechend dem Akkreditiertem System qualifiziert bzw. messtechnisch rückgeführt sind.
We hereby confirm that all test devices, measuring tools and aids used for the certification are qualified or metrologically traceable to the accredited system.

Zertifikate ohne Unterschrift und Dienstsiegel haben keine Gültigkeit. Dieses Zertifikat darf nur vollständig und unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung des Beschussamtes Ulm.
Der Prüfzettel ist Grundlage und Bestandteil des Zertifikats.
Only the original certificate and signed by the proof house is valid. This certificate may only be passed on in its entirety and without modification. The use of parts of this certificate is allowed only with the express consent of the Beschussamt Ulm.
The test report is basis and part of the certificate.

Ulm, den 12.10.2021


HAUSSZTER
Leiter der Zertifizierung
Head of certification

Beschussamt Ulm
Altstraße 74

89081 Ulm

Tel.: 0731-9 68 51-0
Fax: 0731-9 68 51-99
beschussam@rpt.bwl.de
www.beschussamt.eu

Dokument: S 10-010 Gemäß Anhang L Stand: 30.04.2020





Baden-Württemberg
Regierungsspräsidium Tübingen

Beschussamt Ulm E&S

Eich- und Beschusswesen Baden-Württemberg

Staatliche Prüf- und Zertifizierungsstelle für Waffen- und Sicherheitstechnik

Legal verification and certification office for weapons and security engineering

Prüfbericht – Test report

S 21 0068 01 / B

Durchschusshemmende Verbundsicherheitsverglasung

Bullet resistant laminated glazing

Antragsteller:

Applicant:

GLASS SOLUTIONS LLC
Ras Al Khaimah Port
P.O. BOX 35410
UAE - RAS AL KHAIMAH

Hersteller:

Manufacturer:

GLASS SOLUTIONS LLC
Ras Al Khaimah Port
P.O. BOX 35410
UAE - RAS AL KHAIMAH

Ort und Datum der Prüfung:

Location and test date (d.m.y.):

89081 Ulm, 12.10.2021

Prüfvorgabe:

Test requirement:

Geforderte Widerstandsklasse **BR6 NS**
Required resistance class **BR6 NS**

Gegenstand der Prüfung:

Item under test:

VSG-Verglasung
Laminated glazing

500 x 500 x 41,60 mm [Istmaße / Actual sizes]
(22,10 kg)

EN 1063 BR6 NS

Typebezeichnung:
Product reference:



Mitglied der VPAM

Beschussamt Ulm
Albstraße 74
89081 Ulm

Tel.: 0731-9 68 51-0
Fax: 0731-9 68 51-99
beschussamt@rpt.bwl.de
www.beschussamt.eu

Ulm, den 12.10.2021



S. Junginger
S. Junginger
Head of Examination
Seite 1 von 6 Seiten
Page 1 of 6 pages

Document: S 10-010 Genehmigung: L Stand: 30.04.2020

Allgemeine Angaben

General details

Art der Probennahme: Vom Antragsteller ausgewählt und angeliefert am 05.10.2021

Taking of samples:

Prüfer: M. Günther

Tester:

S. Junginger

Teilnehmer:

Participants:

Prüfvorgaben

Specifications of the standard

Entsprechend der Widerstandsklasse **BR6** NS nach DIN EN 1063

According to the resistance class **BR6** NS of DIN EN 1063

Waffe:

Weapon:

Prüflauf

Test barrel

7,62 x 51 mm

Munition:

Ammunition:

Art

Type

Kaliber:

Calibre

Draillänge:

Twist length

Geschoss:

Bullet

Vollmantel, Spitz, Weichkern; Typ: DM41

Required bullet velocity:

Full jacket, pointed, soft core; Type: DM41

Schussentfernung:

Test distance:

9,50 ± 0,10 Gramm / gram

Geschossgewicht:

Bullet weight

Losnummer:

Lot number

9,50 ± 0,10 Gramm / gram

BaU 7,62 DM41MEN

1/3/3 L1

Geforderte Geschoss-

geschwindigkeit:

Required bullet velocity:

830 ± 10 m/s

Schussentfernung:

Test distance:

10 ± 0,50 m

830 ± 10 m/s

10 ± 0,50 m



Versuchsaufbau:

Test setup:

Prüfmuster 90° (0° Nato) zur Schussrichtung befestigt

Test sample fixed 90° (0° Nato) to the shooting direction

Trefferbild:

Hit location:

Dreieck, Seitenlänge 120 mm ± 10 mm (je Probe)

Triangle 120 mm ± 10 mm (each sample)

Details zum Gegenstand der Prüfung

Details to the item under test

Art:

Sample description:

VSG-Verglasung

Laminated glazing

Abmessungen:

Size / thickness: 500 x 500 x 41,60 mm [istmaße / Actual sizes]

Anzahl:

Number of samples:

3

Aufbau:

(Beginnend mit Angriffsseite)

Composition:

(Starting from the attack face)

Gl = Glas / Glass
PVB = PVB-Folie / PVB-foil
PU = Polyurethan-Folie / Polyurethane foil
LX = Lexan-Folie / Lexan-foil

Sonstige Angaben:

Further information:

Prüfmusterreinlagerung: 12 Stunden bei +21° C

Umgebungstemperatur während der Prüfung: +21° C

Test sample stored prior to test: 12 hours at +21° C

Ambient temperature during the test: +21° C

Typenbezeichnung:

EN 1063 BR6 NS

Product reference:

Darstellung der Prüfergebnisse

Presentation of the test results

Probe Nr. Sample number	Schuss-folge Shot number	$V_{2,5}^{(1)}$ [m/s]	$E_{2,5}^{(2)}$ [Joule]	Auswertung ³⁾ Evaluation	Trefferabstände Hit distances
09215683	1.	838	3336	KD, NS	1 - 2 = 120 mm
	2.	832	3288	KD, NS	1 - 3 = 120 mm
	3.	838	3336	KD, NS	2 - 3 = 120 mm
09215722	1.	835	3312	KD, NS	1 - 2 = 121 mm
	2.	836	3320	KD, NS	1 - 3 = 120 mm
	3.	838	3336	KD, NS	2 - 3 = 118 mm
09215643	1.	833	3296	KD, NS	1 - 2 = 120 mm
	2.	837	3328	KD, NS	1 - 3 = 120 mm
	3.	838	3336	KD, NS	2 - 3 = 119 mm

1) $V_{2,5}$ = Geschossgeschwindigkeit 2,5 m
vor dem Prüfmuster
Bullet velocity 2,5 m in front of the
sample

2) $E_{2,5}$ = Geschossenergie 2,5 m vor dem
Prüfmuster
Bullet energy 2,5 m in front of the
sample

3) KD = Kein Durchschuss / No penetration
D = Durchschuss / Penetration
S = Splittersabgang auf der Rückseite des Prüfmusters /
Splinters on the rear side of the sample
NS = Kein Splittersabgang auf der Rückseite des Prüfmusters /
No splinters on the rear side of the sample

Ergebnis der Prüfung (Zusammenfassung)

Result of the test (summary)

Die Verglasung erfüllt die Prüfanforderungen der Widerstandsklasse BR6 NS

The glazing meets the requirements of the resistance class BR6 NS

Zertifikat erstellt: Ja / Yes S 21 0068 01 / Z
Certificate issued:
 Nein / No

Der Prüfbericht ist Grundlage für das erstellte Zertifikat.
The test report is the basis for the issued certificate.

Fotodokumentation

Photo documentation

Prüfmuster 1 / Test sample 1: 09215683

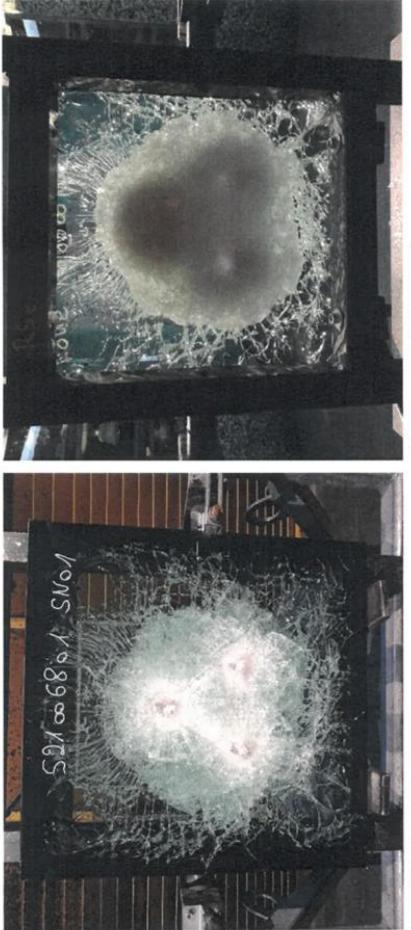


Foto / Photo: Beschussamt Ulm
Nr. / No.: S 21 0068 01; B02

Prüfmuster 2 / Test sample 2: 09215722



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 21 0068 01; B04

Foto / Photo: Beschussamt Ulm
Nr. / No.: S 21 0068 01; B03

Prüfbericht-Nr.:
Test report number:

S 21 0068 01 / B

Beschussamt Ulm eG

Prüfmuster 3 / Test sample 3: 09215643

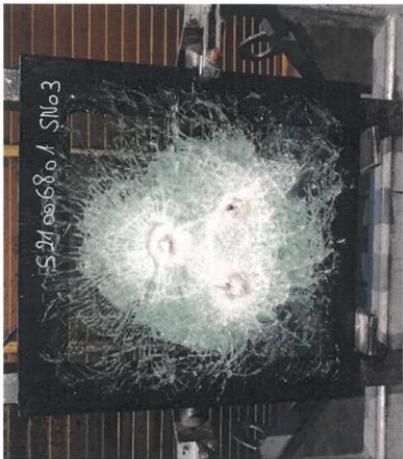


Foto / Photo: Beschussamt Ulm
Nr. / No.: S 21 0068 01; B05

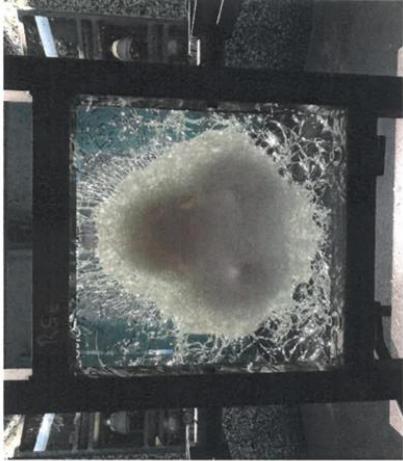


Foto / Photo: Beschussamt Ulm
Nr. / No.: S 21 0068 01; B06



Baden-Württemberg

Regierungspräsidium Tübingen

Beschussamt Ulm

Eich- und Beschusswesen Baden-Württemberg

Staatliche Prüf- und Zertifizierungsstelle für Waffen- und Sicherheitstechnik
Legal verification and certification office for weapons and security engineering

Zertifikat - Certificate

S 23 0079 01 / Z

Durchschusshemmende Verglasung

Bullet resistant glazing

Antragsteller

Applicant

Hersteller

Manufacturer

GLASS SOLUTIONS LLC
UAE - RAS AL KHAIMAH
GLASS SOLUTIONS LLC
UAE - RAS AL KHAIMAH

Ort und Datum der Prüfung

Location and test date (dd.mm.yyyy)

89081 Ulm, 26.10.2023

Prüfvorgabe

Test requirement

Nach Kundenspezifikation
Verfahren: STANAG 4569, AEP55; Level 2
To Applicant's specification
Method: STANAG 4569, AEP55; Level 2

Gegenstand der Zertifizierung

Item under certification

VSG-Verglasung
Laminated glazing
500 x 500 x 60,90 mm / 33,60 kg
[Istmaße / Actual sizes]

Typenbezeichnung

Product reference

GLASS SOLUTIONS LLC

Referenz / Reference: Sample 1-8

Details siehe Prüfbericht-Nr.

Details see test report number

S 23 0079 01 / B

Erfüllt die Kundenspezifikation / Meets Applicant's specification

Kaliber; Geschoss / Calibre; bullet: 7,62 x 39 mm; BZ; 7,70 Gramm / Gram
Geschossgeschwindigkeit / Bullet velocity: 695 m/s ± 20 m/s
Schussrichtung / Shooting direction: 90° / 0° Nato
Prüfmustertemperatur / Temperature test sample: +21° C

Hiermit bestätigen wir, dass sämtliche zur Zertifizierung eingesetzten Prüfmittel, Messmittel und Hilfsmittel entsprechend dem akkreditierten System qualifiziert bzw. metrischtechnisch Rückgeführt sind.
We hereby confirm that all test devices, measuring tools and aids used for the certification are qualified or metrologically traceable to the accredited system.
Zertifikat ohne Unterschrift und Dienststempel haben keine Gültigkeit. Dieses Zertifikat darf nur vollständig und unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung des Beschussamtes Ulm.
Der Prüfbericht ist Grundlage und Bestandteil des Zertifikats.
Only the original certificate stamped and signed by the Proof House is valid. This certificate may only be passed on in its entirety and without modification. The use of parts of this certificate is allowed only with the express consent of the Beschussamt Ulm.
The test report is basis and part of the certificate.



Mitglied der VPAM

Ulm, den 31.10.2023

Akkreditierte Prüf- und
Zertifizierungsstelle


DAkkS
Deutsche
Akkreditierungsstelle
D-ZE-17047-01-00
TONNIER
Leiter der Zertifizierung
Head of certification

Dokument: SI 51-020 - Genehmigung L - Stand: 30.04.2020


Ul, den 31.10.2023

Beschussamt Ulm
Albstraße 74

89081 Ulm
Tel.: 0731-9 68 51-0
Fax: 0731-9 68 51-99
beschussamt@opr.bw.de
www.beschussamt.eu





Beschussamt Ulm Eich- und Beschusswesen Baden-Württemberg

Staatliche Prüf- und Zertifizierungsstelle für Waffen- und Sicherheitstechnik
Legal verification and certification office for weapons and security engineering

Prüfbericht – Test report

S 23 0079 01 / B

Durchschusshemmende Verglasung

Bullet resistant glazing

Antragsteller:

Applicant:

GLASS SOLUTIONS LLC
WH 1.3 Ras Al Khaimah Port
P.O. BOX 35410
UAE - RAS AL KHAIMAH

Hersteller:

Manufacturer:

GLASS SOLUTIONS LLC
WH 1.3 Ras Al Khaimah Port
P.O. BOX 35410
UAE - RAS AL KHAIMAH

Ort und Datum der Prüfung:

Location and test date (dd.mm.yyyy):

89081 Ulm, 26.10.2023

Prüfvorgabe:

Test requirement:

Nach Kundenspezifikation
Verfahren: STANAG 4569, AEP55; Level 2
To Applicant's specification
Method: STANAG 4569, AEP55; Level 2

Gegenstand der Prüfung:

Item under test:

VSG-Verglasung
Laminated glazing
500 x 500 x 60,90 mm / 33,60 kg
[Istmaße / Actual sizes]

Typenbezeichnung:

Product reference:

GLASS SOLUTIONS LLC
Referenz / Reference: Sample 1-8



Mitglied der VPAM

Beschussamt Ulm
Albstraße 74
89081 Ulm

Tel.: 0731-9 68 51-0
Fax: 0731-9 68 51-99
beschussamt@rpt.bwl.de
www.beschussamt.eu

Der Prüfbericht bezieht sich ausschließlich auf das zur Prüfung vorgestellte Prüfobjekt.
Prüfberichte ohne Unterschrift und Dienstsiegel haben keine Gültigkeit. Dieser Prüfbericht darf nur vollständig und
unverändert weiterverbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung des Beschussamts Ulm.
Als rechtmäßige Fassung gilt nur die deutsche Ausführung.
The test report refers exclusively to the presented item under test.
Only the original test report stamped and signed by the Proof House is valid. This report may only be passed on in its entirety and without
modification. The use of parts of this report is allowed only with the express consent of the Beschussamt Ulm.
The German version is the only legally binding version.

Ulm, den 31.10.2023:

S. Junginger
S. Junginger
Leiter der Prüfung
Head of examination

S. Junginger
S. Junginger
Seite 1 von 8 Seiten
Page 1 of 8 page:

Allgemeine Angaben

General details

Art der Probennahme: Vom Antragsteller ausgewählt und angeliefert am 20.10.2023

Choosen and delivered on 20.10.2023 (dd.mm.yyyy) by the Applicant

Taking of samples:

Specified in the test

Prüfer: Vom Antragsteller ausgewählt und angeliefert am 20.10.2023

Choosen and delivered on 20.10.2023 (dd.mm.yyyy) by the Applicant

Taking of samples:

Specified in the test

Prüfer:

Specified in the test

Tester:

Specified in the test

Teilnehmer:

Specified in the test

Participants:

Prüfvorgaben

Specification of the test

Munitionsart / Type of ammunition

Waffe:

Weapon:

Prüflauf

Test barrel

Art

Type

Kaliber / Dralllänge

Calibre /Twist length

Geschoß

Bullet

Geschoßgewicht

Bullet weight

Losnummer

Lot number

**Geforderte Geschoss-
geschwindigkeit:**

Required bullet velocity:

695 m/s ± 20 m/s

Schussentfernung:

Test distance:

10 m



Details zum Gegenstand der Prüfung

Details to the item under test

Art:

VSG-Verglasung

Laminated glazing

Abmessungen:

500 x 500 x 60,90 mm [Istmaße / Actual sizes]

Abmessungen:

Size / thickness:

8

Anzahl:

Number of samples:

Aufbau:

(Beginnend mit Angriffsseite)

Composition:

(Starting from the attack face)

10,00mm Gl 0,76mm PVB 10,00mm Gl 0,76mm PVB 8,00mm Gl 0,76mm PVB

8,00mm Gl 0,76mm PVB 8,00mm Gl 0,76mm PVB 3,00mm PC

[Nominal size / Nominal sizes]

Gl = Glas / Glass

PVB = PVB-Folie / PVB-foli

PC = Polycarbonat Scheibe / Polycarbonate

Sonstige Angaben:

Further information:

Prüfmustereinlagerung: 24 Stunden bei +21° C
Umgebungstemperatur während der Prüfung: +21° C

Test sample stored prior to test: 24 hours at +21° C

Environmental temperature during the test: +21° C

Probengewicht 33,60 kg

Weight of test sample: 33,60 kg

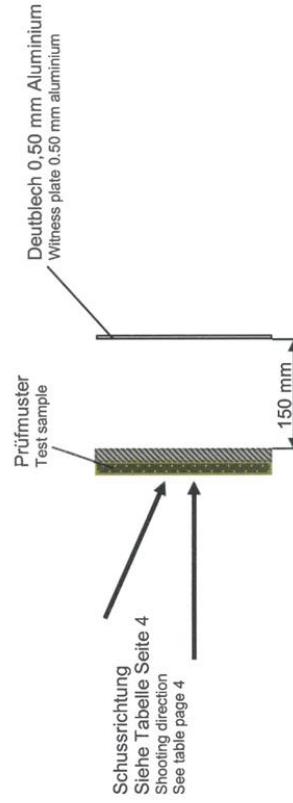
Typenbezeichnung:

GLASS SOLUTIONS LLC

Product reference:

Versuchsaufbau

Test setup



Darstellung der Prüfergebnisse

Presentation of the test results

Kaliber; Geschoss / Calibre; bullet: 7,62 x 39 mm; BZ

Trefferbild: Trefferdreieck 120 mm +20 mm

Hit location: Hit triangle 120 mm +20 mm

Hit location: Hit triangle 120 mm +20 mm

Probe Sample	Schuss- folge Shot number	Schuss- richtung Shooting direction	Trefferabstände [mm] Hit distances [mm]	$V_{2,5}^{(1)}$ [m/s]	$E_{2,5}^{(2)}$ [Joule]	Auswertung Evaluation
1 09231328	1.	90°	1 - 2 = 136	691	1838	PP RS _e 0M / DBI 0M
	2.	0° Nato	1 - 3 = 137	693	1849	PP RS _e 0M / DBI 0M
	3.		2 - 3 = 125	710	1941	PP RS _e IB _o R / DBI 0M
2 09231327	4.	4 - 5 = 130	705	1914	PP RS _e 0M / DBI 0M	
	5.	4 - 6 = 135	696	1865	PP RS _e 0M / DBI 0M	
	6.	5 - 6 = 133	701	1892	PP RS _e IB _o R / DBI 0M	
3 09230850	7.	7 - 8 = 125	690	1833	PP RS _e 0M / DBI 0M	
	8.	7 - 9 = 125	693	1849	PP RS _e 0M / DBI 0M	
	9.	8 - 9 = 128	699	1881	PP RS _e IB _o R / DBI 0M	
4 09230849	10.	10 - 11 = 125	695	1860	PP RS _e 0M / DBI 0M	
	11.	10 - 12 = 120	691	1838	PP RS _e 0M / DBI 0M	
	12.	11 - 12 = 125	698	1876	PP RS _e IB _o R / DBI 0M	
5 09231416	13.	13 - 14 = 130	694	1854	PP RS _e 0M / DBI 0M	
	14.	13 - 15 = 120	691	1838	PP RS _e 0M / DBI 0M	
	15.	14 - 15 = 125	695	1860	PP RS _e IB _o R / DBI 0M	
6 09231073	16.	16 - 17 = 125	698	1876	PP RS _e 0M / DBI 0M	
	17.	16 - 18 = 125	697	1870	PP RS _e 0M / DBI 0M	
	18.	17 - 18 = 130	695	1860	PP RS _e IB _o R / DBI 0M	
7 09231074	19.	19 - 20 = 130	693	1849	PP RS _e 0M / DBI 0M	
	20.	19 - 21 = 130	693	1849	PP RS _e 0M / DBI 0M	
	21.	20 - 21 = 130	695	1860	PP RS _e IB _o R / DBI 0M	
8 09231326	22.	Einzelschuss / Single shot	695	1860	PP RS _e 0M / DBI 0M	

Pendelung: 22 x < 3 Grad (mit Hilfe Pendelkarten ermittelt)

Yaw: 22 x < 3 degrees (determined by using of yaw cards)

1) $V_{2,5}$ = Geschossgeschwindigkeit 2,5 m
vor dem Prüfmuster

Bullet velocity 2,5 m in front of the
sample

2) $E_{2,5}$ = Geschossenergie 2,5 m vor dem
Prüfmuster

Bullet energy 2,5 m in front of the
sample

PP = Teildurchdringung (Deutblech ohne Lichtdurchlass)
Partial penetration (Witness plate without light)

CP = Komplette Durchdringung (Ziel und Deutblech durchdringen)
Complete penetration (Target and witness plate penetrated)

o.W. = Ohne Wertung / Without evaluation

RS_e = Rückseite der Probe / Rear side of the sample

DBI = Deutblech / Witness plate

0M = ohne Merkmal / Without mark

IB_oR = Leichte Blei ohne Riss / Little bump without crack

Bm₀R = Blei ohne Riss ohne Lichtdurchlass / Bump without light

Bm_R = Blei mit Riss und Lichtdurchlass / Bump with crack and light

Rest! = Restleistung / Residual penetration

Fotodokumentation

Photo documentation

Probe 1 / Sample 1: 09231328



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B01



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B02

Probe 2 / Sample 2: 09231327



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B03



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B04

Probe 3 / Sample 3: 09230850



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B06

Probe 4 / Sample 4: 09230849



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B07



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B06

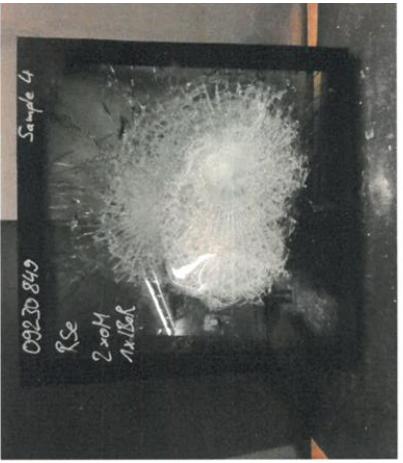


Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B08

Probe 5 / Sample 5: 09231416



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B09

Probe 6 / Sample 6: 09231073



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B11



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B10



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01; B12

Probe 7 / Sample 7: 09231074



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01, B13

Probe 8 / Sample 8: 09231326



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01, B15



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01, B14



Foto / Photo: Beschussamt Ulm
Nr. / No.: S 23 0079 01, B16



ج.و.د.ب
JORDAN DESIGN & DEVELOPMENT BUREAU

RESTRICTED

المـدـرـسـةـ الـأـدـدـيـةـ الـسـعـدـيـةـ وـالـطـبـورـيـةـ

Approval

Summary Test Result

Ballistic Resistance Test

84 mm Armored Glass

Customized Special Test

0.50 Cal Ball M33 Bullet @ 50m

GLASS SHIELD INDUSTRIAL CO.

Compiled by

Head of Weapons, Ammunition & Armor Testing
Eng. Issa Abed AL Rahman Rawashdeh

Approved by

Head of Test & Evaluation Department
Dr. Eng. Riyad Ali Rattout

Signature

Date

7 August 2023

1. Test Data	
Requester	JODDB / Sales
Contractor	GLASS SHIELD INDUSTRIAL CO / Warehouse No. W 8 Block 14, AQABA, JORDAN
References	<ul style="list-style-type: none"> Test and Evaluation Request No.1190 dated 03/07/2023 Test Proposal No. JODDB/TEST/BTF/TP/1190-1 Dated 01/08/2023 <p>(See Appendix A)</p>
Test Sample	84.45mm Ballistic Glass / S.N.11218743 / Size 1000x1000mm (See Photos No. 1)
Manufacturer	GLASS SHIELD INDUSTRIAL CO.
Test Type	Ballistic Resistance Test
Test Standard	Customized Special Test "0.50 Cal Ball M33 Bullet"
Test Site	Ballistic Testing Facility (JODDB)
Samples Received Date	31 th July 2023
Test Temperature	22 °C
Test Weapon	NATO Universal Ballistic Breech with standard barrel: 12.7x99mm SN:3834
Type of Bullets	0.50 Cal Ball M33 Bullet Batch No.00307/H (See Photos No. 1)
Test Equipment	<ul style="list-style-type: none"> Doppler Radar SN.3503-13-270-0111 (± 0.4 m/s) Digital caliper SN. 112167 (± 0.05 mm) Temp .Hum. Meter SN.95941255 (± 0.3 °C) Distance laser Measuring Device (Lacia) SN. 1030969032 (±2 mm)
Test Conducted By	<ul style="list-style-type: none"> Eng. Ali Sardyah Eng. Sameer Obaidat Eng. Mohammad Akilan Seiner Technician- Jalal Gulilat Seiner Technician Hasm Debs Technician Islam Al Qusashi Technician Muath Anagrh
Test Date	2 nd August 2023

Note: The results contained in this Summary Test Result are only valid for detailed above and the Summary Test Result shall not be reproduced except in full without approval of the laboratory.

2. Test Results

84.45mm Ballistic Glass/S.N.11218743 / Size 1000x1000mm

Customized Special Test

Threat	Shot No.	Bullet Velocity @ 50m (m/s)	Status P- Perforation NP- No Perforation
“0.50 Cal Ball M33 Bullet” @ 50m	1	926.3	NP
Distance between shots 35±5 cm	2	917.7	NP
	3	910.6	NP

NP- No Perforation. See photos No.2

P- Perforation:

Perforation of the test Sample by the bullet or parts of the bullet or perforation of the witnessfoil.

NP- No Perforation:

No perforation of the test Sample by the bullet or parts of the bullet and No perforation of the witness foil.

RANGE EQUIPMENT & CONFIGURATION

HE GUN

he test sample was shot from the NATO Universal Ballistic Breech with the appropriate standard barrel and bullet type to give projectile stability.

ELOCITY MEASUREMENT

he projectile velocity was measured using Doppler Radar System at 1 m from the Striking Face with uncertainty .4 m/s

INSTANCE MEASURMENTS

est range distance was measured by laser measuring device with uncertainty 2 mm, striking distances were marked by a digital calipers with uncertainty 0.05 mm.

UPPORT FIXTURE

he test sample was supported by a fixture that permits its position and attitude to be readily adjusted so that it is perpendicular to the line of flight of the bullet at the point of impact.

IMING

he aiming process has been achieved by using standard laser bullets.

HOT PLACEMENT

.11 shots hit the test sample in the required pattern, with the required place.

PLINTER COLLECTING BOX & WITNESS FOIL

is fully enclose the space between the test piece and the 0.02 mm thickness standard witness foil with density 54 /m² which is mounted in the splinter collecting box in a vertical position at a distance of (500 ± 10) mm behind the test piece.

Close Focus Research

Ballistic Testing Services

Phone: 800-513-4291 Email: techsupport@CloseFocusResearch.com

Name: Glass Solutions LLC

Address: WH 1.3 Ras Al Khaima Port, Al Mairid Corniche, P.O Box

Phone: Phone: +971 7 2080092 / Mobile: +971 50 3170765

Page 1 of 2

Ballistic Test Report

Report Number: BTR-01-20-2022-Sample 3

CloseFocusResearch.com

Report Date: January 20, 2022

Contact: Lorita Dela Cruz

Email: rhizad02.glasssolutions@gmail.com

Ballistic Results

Project Summary

Type of Products to be tested:	Bullet Resistant Glazings	<input type="checkbox"/> ASTM	<input type="checkbox"/> Canadian	<input type="checkbox"/> FRA	<input type="checkbox"/> CR Pass All
Test Specimen Sample size(s):	500 x 500 mm	<input type="checkbox"/> Australian	<input checked="" type="checkbox"/> EN1063	<input type="checkbox"/> Germ DIN	<input type="checkbox"/> State Dept
Number of Test specimens:	3 Samples	<input type="checkbox"/> British	<input type="checkbox"/> EN1522/23	<input type="checkbox"/> MIL-SAMIT	<input type="checkbox"/> UL 752
Weight of all samples:	291.6 lbs	<input type="checkbox"/> Other			
Are Materials a Health Hazard:	No				
Need the Tests performed by:	within 5 days				
Need products shipped back:	No				
Purchase Order Number:	Not Applicable				

Test Results

Test Sample: Sample 3

Item / Part Number: 3 / SR 12219914

Date of Manufacture: January 7, 2022

Description: Bullet Resistant Glazing

Sample Size: 19.7 x 19.7 inch (500 x 500 mm)

Thickness: 3.060 inch (77.7 mm)

Weight: 97.2 lbs (44.1 kg)

Weapon Type: 7.62 NATO

Cartridge / Projectile Type: 7.62 x 51 NATO FCJ steel hard core AP

Projectile Weight: 150 grains

Target Distance: 32.8 feet

Number of Shots: 3 shots

Shot Sequence: Shot 1 Shot 2 Shot 3

Impact Velocity (ft/sec) *: 2,688 2,695 2,698

Impact Energy (ft-lbs): 2,406 2,419 2,424

Impact Momentum (lb-sec.): 1.79 1.79 1.80

Impact Angle (degrees): 0° 0° 0°

Sample Penetration: NP NP NP

Witness Plate Penetration: NP NP NP

Impact Spacing (inches) **: 4.30 4.60 3.80

Impact Spacing / Pattern: 4.23 inch (average)

Witness plate material: 0.0008 in. thick Type 1100 Aluminum foil

Spall catch box: 17.32 x 17.32 in.

Witness / Box Distance: 19.7 inches

Spall Occurrence: No spall occurred

Test Temperature: 63 ° F

Test Date: January 20, 2022

Pass / Fail Results: Passed the Test

Comments:

Footnotes

* Velocity measurements were taken at a distance of 8.2 feet from muzzle.

** Impact Spacing is the distance between shots (shot 1 = 3 to 1, shot 2 = 1 to 2, shot 3 = 2 to 3)

Test and Report Engineers

Tested and Reported by: Sam Raheb

Signature: 

Date: January 20, 2022

Form: BTR22P-12 © 2/06 Close Focus Research

Close Focus Research

Ballistic Testing Services

Phone: 800-513-4291 Email: techsupport@CloseFocusResearch.com**Page 2 of 2****Ballistic Test Report**Report Number: BTR-01-20-2022-Sample 3
CloseFocusResearch.com

Name: Glass Solutions LLC

Ballistic Test Results and Photographs

Report Date: January 20, 2022

Ballistic Test Results:

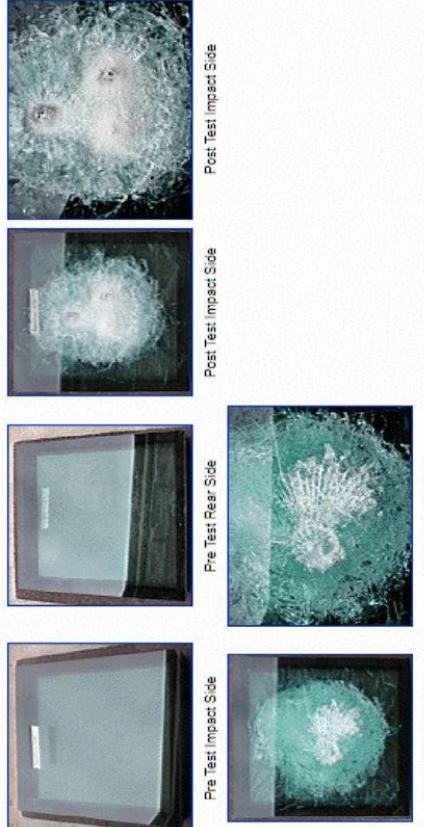
Test Sample 3 passed the European EN1063 [No Splinters] EN BR7 [NS] (7.62 x 51 NATO 150 gr FCJ SHC AP) Ballistic test. There was no complete penetration of the test sample from any of the 7.62 x 51 NATO FCJ steel hard core AP caliber projectiles. This test sample is assigned the EN1063 [NS] No Splinters Rating.

Witness Plate and Spall Effects:

No spall occurred or damage to the 0.00008 in. thick Type 1100 Aluminum foil witness plate was observed.

Photographs

The following photographs show both the pre and post-test sample. Additional larger sized photographs are included with this report.

Sample 3: SR. 12219914 - D.O.M. January 7, 2022 - EN BR7 [NS] - 500 x 500 x 77.7 mm

Test and Report Engineers

Tested and Reported by: Sam Raheb

Signature: 

Date: January 20, 2022

Form: BTR22P-12 © 2/06 Close Focus Research

4-Official Papers



العنوان الوطني
NATIONAL ADDRESS

Proof Number	106/0044751
Original Date	27/7/2025
Expiration Date	23/1/2026

إثبات عنوان Address Proof

Address Holder Details

Name	Company Modern Metalworks
Customer Acc.	3 1 3 3 2 7 3 0 0 4 0
Reg. Date	27/7/2025

Address Details

Short Address	J E S A 7 6 2 5
Building No.	Street
7 6 2 6	Ahmad Zeni
Secondary No.	District
3 0 4 2	As Salamah Dist.
Postal Code	الرقمي البريدي
2 3 5 2 5	3 0 4 2
City	العنوان المقترن
JEDDAH	العنوان المقترن
Kingdom of Saudi Arabia	رقم العنوان

تفاصيل العنوان

شركة مودرن ميتالواركس	الاسم
3 1 3 3 2 7 3 0 0 4 0	رقم الصناب
27/7/2025	تاريخ التسجيل



للحقيقة
To Verify
<https://proof.address.gov.sa/Verify/ProofNA.aspx>

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تم إصدار هذا الإثبات على طلب الموقع عليه ويعذر مطاعمه تغييره أو إدخال أي تعديلات عليه سواء بالاصطدام أو الحذف، وبعد إدخاله إلى المنساعنة الشفوية.

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This proof has been issued upon the request of the above named, and it is absolutely prohibited to imitate it or make any modifications to it, whether by addition or deletion, and the proof is considered void if it is marred by something, and its owner is subject to legal accountability.



التأمينات الاجتماعية Social Insurance

شُوَادَّةٌ

منشأة غير حاضرة لأحكام النظام

اسم المنسابة	اسم صاحب العمل	رقم الاشتراك	العنوان
شركة مودرن ميتالوركس	الرقم الوطني الموحد	655656324	السعودية 23525
7050493530			

تشهد المؤسسة العامة للتأمينات الاجتماعية بأن المنشأة المذكورة أعلاه قد أوفت بالتزاماتها تجاه المؤسسة وفق البيانات المقدمة منها حتى تاريخ إصدار هذه الشهادة، والتي تم منحها لتقديمه لأية جهة تطليعاً، وهي صالحة لجميع الأغراض التي نصت عليها الفقرة (٦) من المادة (النinth عشر) من نظام التأمينات الاجتماعية الصادر بالمرسوم الملكي رقم (٣٣/٩) بتاريخ ١٤٢١/٩/٣ هـ والمادة (العاشرة) من نظام التأمينات الاجتماعية الصادر بالمرسوم الملكي رقم (٢٦٢٦/٩) بتاريخ ١٤٤٥/١٢/٢٧ هـ.

هـ. 1447/03/03 - هذه الشهادة سارية المفعول حتى

ملک Public



تحقيق من صحة وصلاحية الشهادة عبر باردة البريد اثناء في المروج الالكتروني المؤسسة العامة
اللبنانية الاجتماعية او عن طريق استخدام البريد المزيف التالي

المملكة العربية السعودية - الرياض 3795 - 3795 Al Wizarat Kingdom of Saudi Arabia, Riyadh 12622 - 8308 8308 Al Wizarat 3795

800 124 3344
9051 GOV.50



شهادة السجل التجاري

البيانات الأساسية للسجل التجاري



7050493530

شركة مودرن ميتالوركس

الرقم الوطني الموحد: 7050493530

تاريخ الإصدار: 27/06/2025

نوع الكيان: شركة ذات مسؤولية محدودة

صفات الشركة : (شخص واحد)

حالة السجل: نشط

5-Joint Ventures

Joint Ventures (SunFrame)

SunFrame Construction Consulting Co.,LTD.

A subsidiary of Yongli Group, Construction Consulting Co., Ltd. was established in September 1986. Over the years, it has grown into a large-scale, multi-functional enterprise, recognized for its expertise and innovation in the construction industry.

The company is not only a leading manufacturer of aluminum profiles but also holds first-class qualifications in façade design. Our specialization covers a wide range of building envelope solutions, including glass façades, aluminum composite panel (ACP) façades, Mashrabiya, and other architectural cladding systems.

We also provide complementary products such as aluminum and glass windows and doors, sunshades, sunrooms, canopies, glass balustrades, louvers, and more.

From concept to completion, we offer end-to-end services—covering design, material supply, project management, and installation—ensuring quality, precision, and client satisfaction at every stage.

Joint Ventures (SunFrame)

Almost 35 years experience, has become a large comprehensive aluminum alloy profile manufacturing enterprise in China.

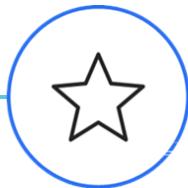
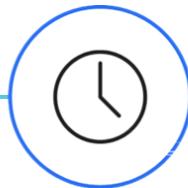
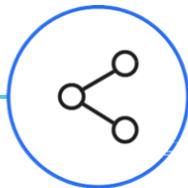
Annual Capacity

Extrusion: 100,000 ton

Facade Fabrication: 500,000sqm

Staff

Over 200 Senior and Intermediate
technical engineers;
over 1000 Staff & Workers

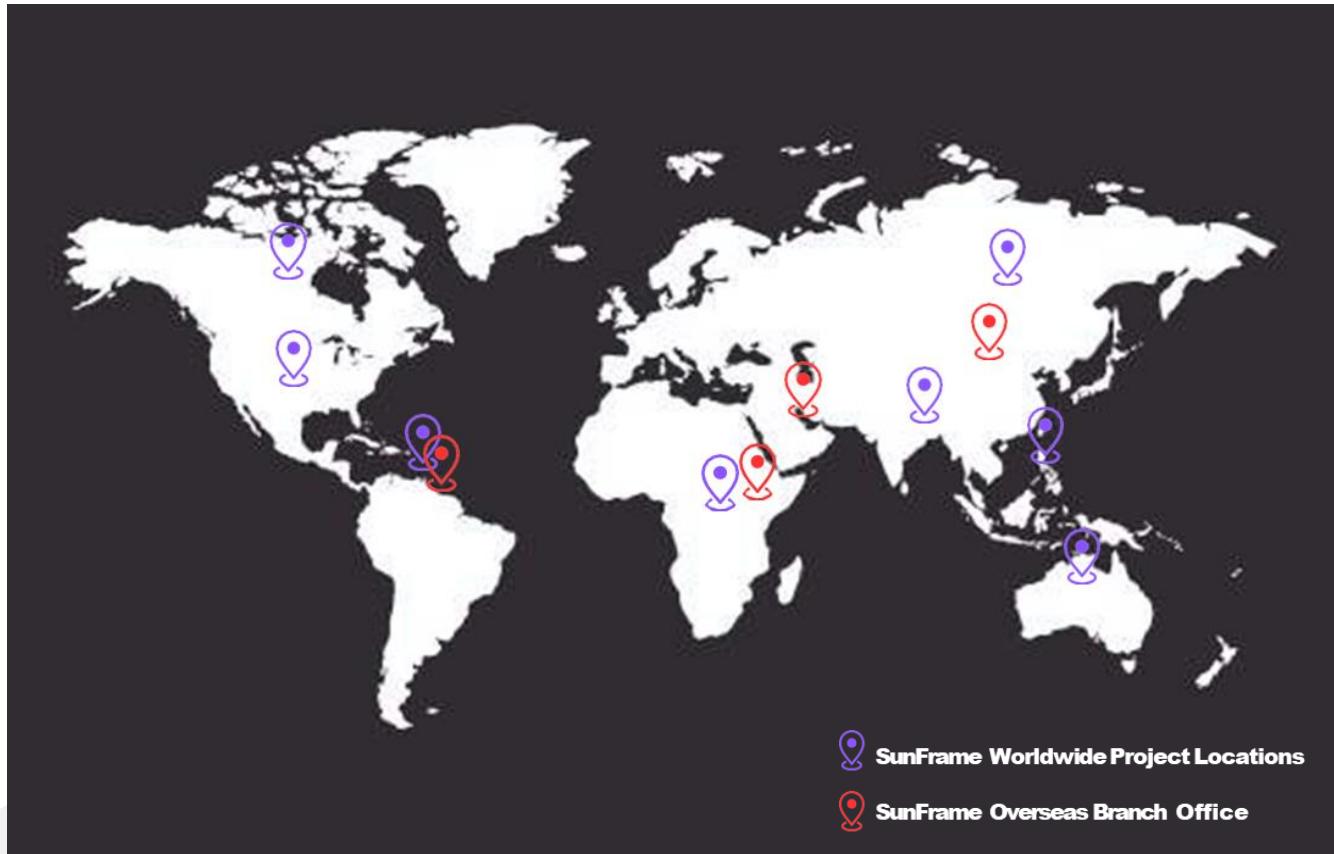


Production
Area Over
200,000 sqm

Alu Products Standards
National GB5237 ISO9001;ISO14001;
OHSAS18001 Japanese JISH4100;
JISH8601; JISH 8602;JISH8601; JISH 8602;
US AAMA 2603; AAMA2604; AAMA2605; UK

BS6496;

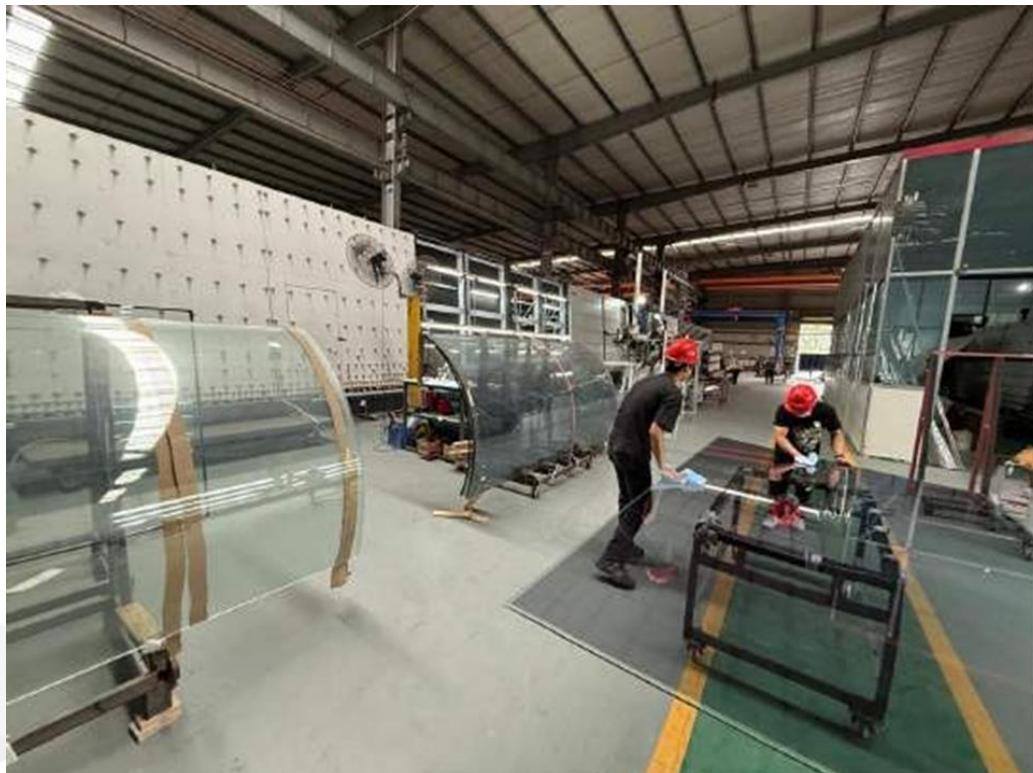
SunFrame Locations



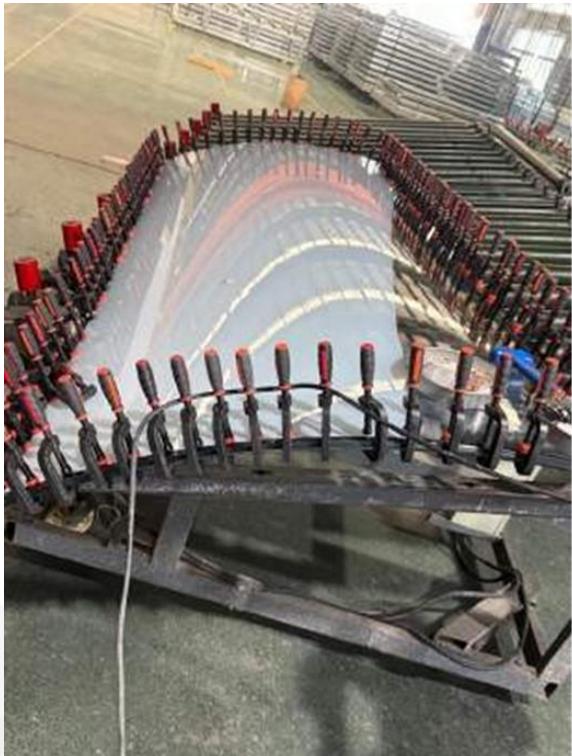
SunFrame Fabrication Area



SunFrame Fabrication Area



SunFrame Fabrication Area



SunFrame Fabrication Area



Extrusion Material

Aluminium Fabrication

Surface Treatment

SunFrame Fabrication Area



Assembly

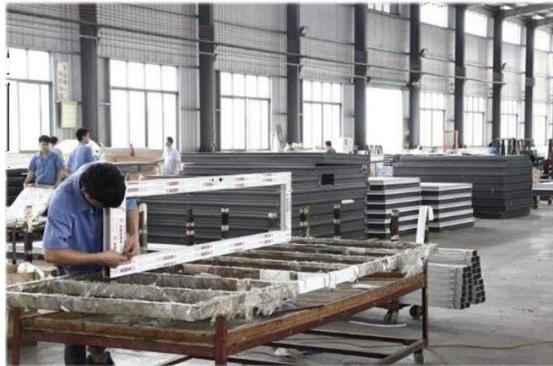


Storage



Workshop View

SunFrame Fabrication Area



Assembling & Fabrication

Honors & Certifications

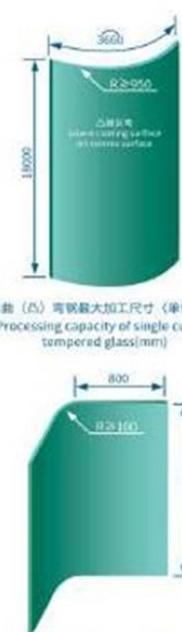
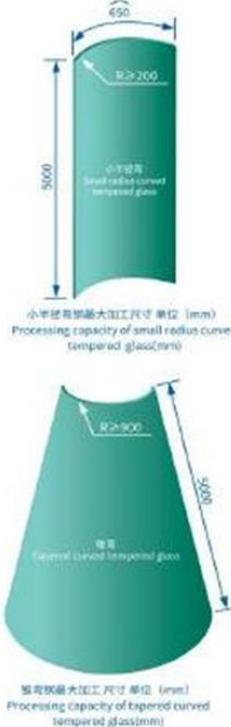


Honors & Certifications

The image is a scanned document for AAMA Certification. It features a large photograph of a window being tested in a large hydraulic press. Below the photo is a 'Summary of Test Results' table. The document includes several certification seals from organizations like 'Certified Manufacturer Window & Doors', 'Certified Hand-Operated Window & Door', 'AAMA Certified', 'Manufactured to AS 2047-2014', and 'Manufactured to AS/NZS 2047-2014'. Text on the page describes the test results and the scope of the certification.

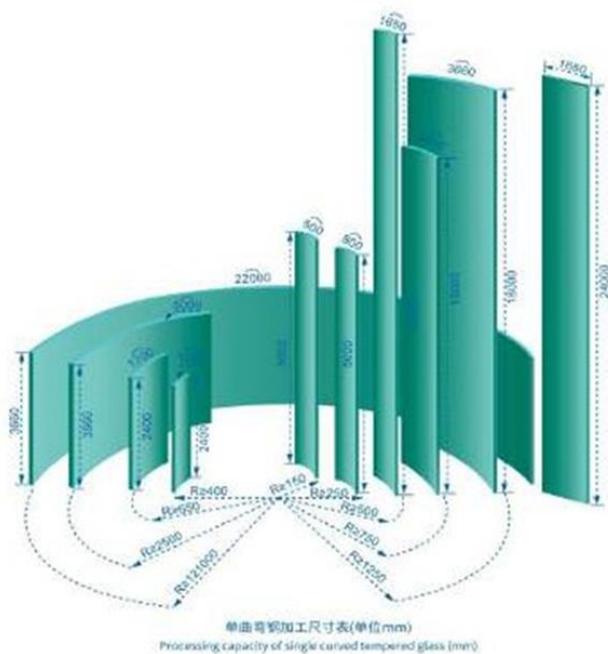
Type Of Glass Works

Curved Glass



单曲 (凸) 弯钢最大加工尺寸 (单位:mm)
Processing capacity of single curved tempered glass(mm)

90°直角弯钢最大加工尺寸 (单位:mm)
Processing capacity of 90° right angle curved tempered glass(mm)



单曲弯钢加工尺寸表(单位:mm)

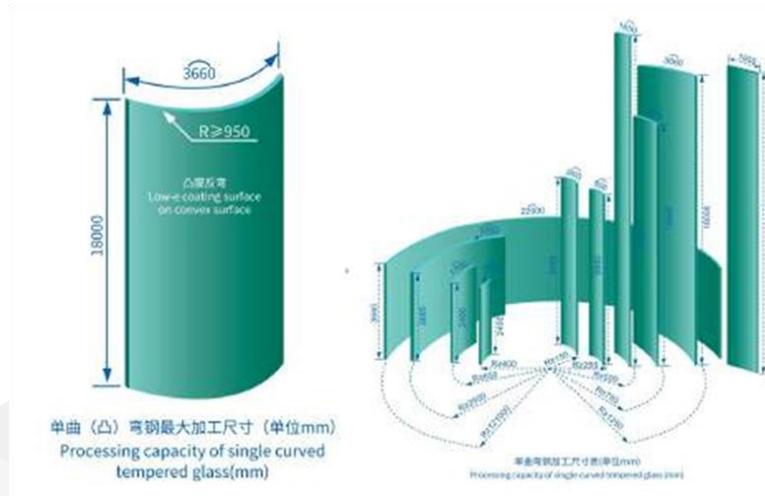


双曲弯钢最大加工尺寸 (单位mm)
Processing capacity of Double-curved
tempered glass (mm)

Type Of Glass Works

Single Curved Glass

Composite processing technology	Digital printing glass	Flat and curved tempered glass	Laminated Glass	Insulated Glass
Maximum Process Size		3660×18000mm	1650×24000mm	
Maximum Load		700 KG/m ²		
Minimum U Value w/ m ² ·°C		0.76		



Type Of Glass Works

Multi Curved Glass

Composite processing technology	Digital printing glass	Flat and curved tempered glass	Laminated Glass	Insulated Glass
Maximum Process Size		3660 × 13000mm		
Maximum Load			700 KG/m ²	
Minimum U Value w/ m ² ·°C			0.76	



Ruci Museum, China

Type Of Glass Works

Semi Circular Curved Tempered Glass

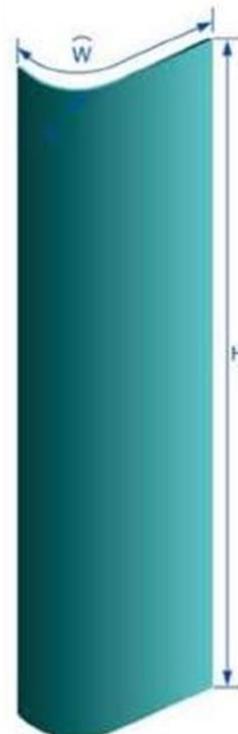
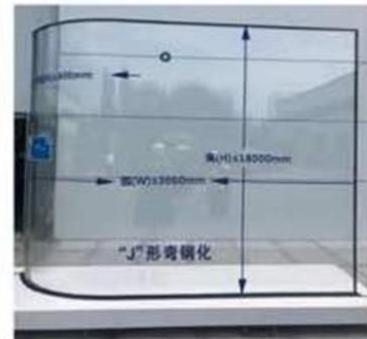
Capable of processing		
R	W	H
150mm	471mm	5000mm
250mm	785mm	5000mm
500mm	1571mm	24000mm
750mm	2356mm	13000mm
1250mm	3660mm	18000mm



Type Of Glass Works

J-Shaped Curved Tempered Glass

Capable of processing		
R	W	H
150mm	471mm	5000mm
250mm	785mm	5000mm
500mm	1571mm	24000mm
750mm	2356mm	13000mm
1250mm	3660mm	18000mm



Type Of Glass Works

V-Shaped Curved Tempered Glass

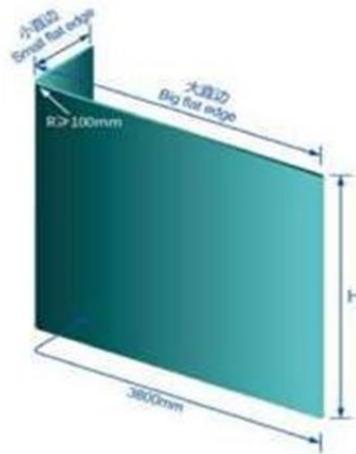
Capable of processing		
R	W	H
150mm	471mm	5000mm
250mm	785mm	5000mm
500mm	1571mm	24000mm
750mm	2356mm	13000mm
1250mm	3660mm	18000mm



Type Of Glass Works

L-Shaped Curved Tempered Glass

Capable of processing		
Small flat edge	Big Flat Edge	H
300mm≤edge≤1200mm	300mm≤edge≤2600mm	≤10000mm



Type Of Glass Works

U-Shaped Curved Tempered Glass

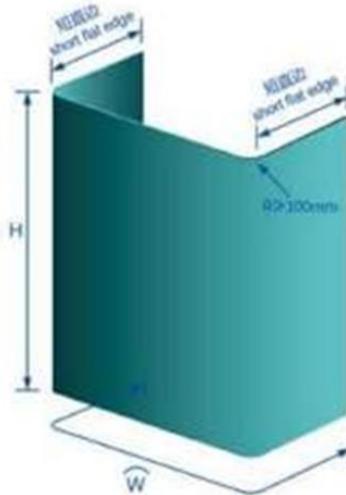
Capable of processing		
R	W	H
500mm	3300mm	5000mm
500mm	3660mm	3660mm
500mm	5000mm	3660mm
500mm	6000mm	3660mm
500mm	8000mm	3660mm
500mm	10000mm	3660mm
500mm	1650mm	24000mm
750mm	2400mm	13000mm
1250mm	3660mm	18000mm



Type Of Glass Works

C-Shaped Curved Tempered Glass

Capable of processing		
W	Short Flat Edge	H
≤3660mm	≤400mm	≤10000mm



Types Of Aluminum Works

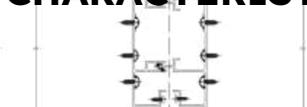
UN 150

UNITIZED CURTAIN WALL

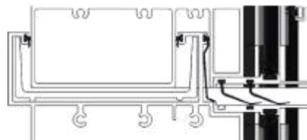
Thermal Break/ Enhanced Stability / Convenience / Waterproof



PERFORMANCE CHARACTERISTICS



Yin and Yang mosaic connection enhance stability



Four-layers waterproofing design



U-Value:
↑ to 1.5W/(m²·K)



Sound Insulation
↑ to 52 dB



Wind load Resistance
±1.40kPa / ±2.10kPa



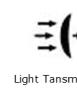
Air permeability
±300 Pa



Light Reduction



Water Resistance



Light Transmittance



Thermal Break



Quick Installation

Glazing Options: **24-60mm** thk

- Floatglass
- Laminated glass
- Insulated glass
- UV-coated glass
- Double / triple silver Low-E glass

UN 150 construction schedule



Site built construction schedule

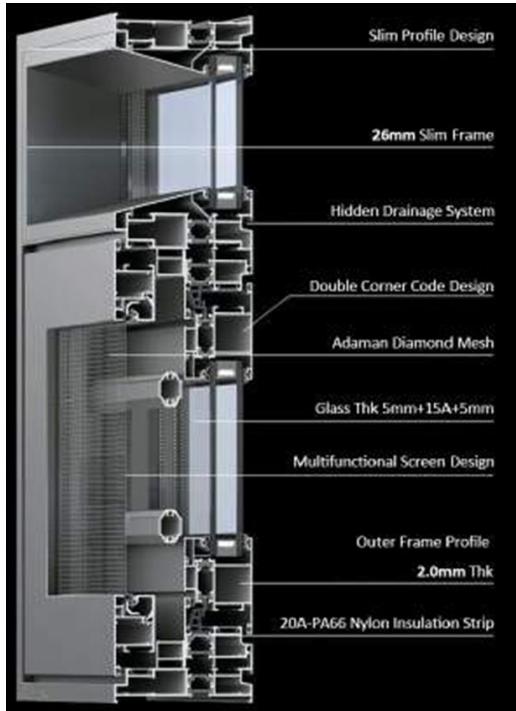


American
Architectural
Manufacturers
Association

Types Of Aluminum Works

ULTRA-106

**26MM ULTRA SLIM
CASEMENT WINDOW**



Types Of Aluminum Works

140A



17MM MINIMALIST SLIDING WINDOWS

17mm Ultra-Narrow Frame / Thermal Break / Embedded handle



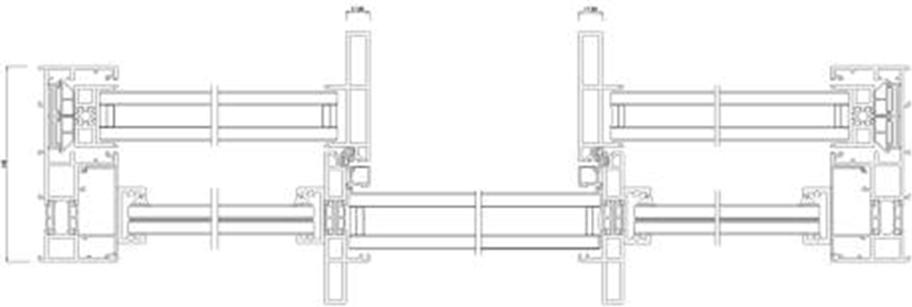
Hollow Aluminum Strip with
Molecular Sieve Embedded
Window Leaf

Thermal break profiles
Enhanced energy efficiency and
indoor comfort

17mm Ultra-Narrow Frame

Standard Glass: **5mm+12A+5mm**

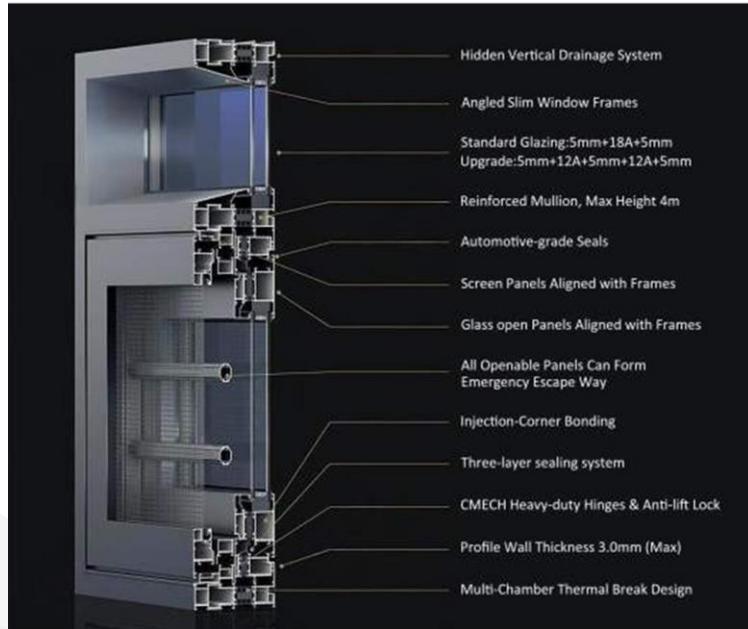
Slope drainage design
Effective Water Management
Reduced Maintenance



Types Of Aluminum Works

121

*TIILT & TURN THERMAL
BREAK CASEMENT WINDOW*

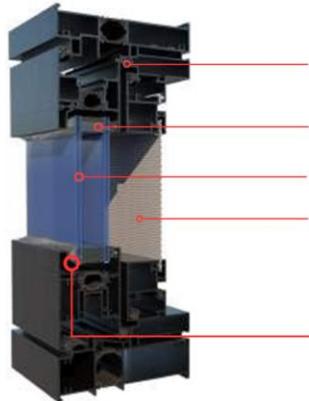


Technical Parameters			
Viewing Surface Width	Profile Occupies Space	Glass Configuration	Profile Wall Thickness
Frame - 56mm Mullion - 78mm Opening - 56mm	Frame - 121mm Mullion - 170mm Opening - 61mm	5mm+18A+5mm 5mm+12A+5mm+12A+5mm	1.8mm-3.0mm

Types Of Aluminum Works

125

125 INSULATED SLIDING
WINDOW SYSTEM



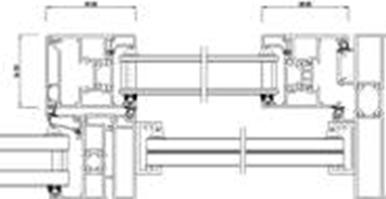
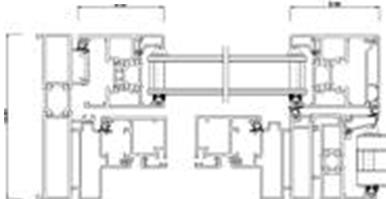
Multi-chamber system
design for Quieter and better insulation

Hollow Aluminum Strip with **Molecular Sieve**

Glass configuration: **5mm+12A+5mm**

Effective Mosquito Prevention
Bent screen design with screw-secured vertical installation ensures sturdy and secure screen setup

Sealing Strip with Hook Design
Reduces metal collision noise, providing collision buffering and excellent sound insulation
Dust-proof brush strip enhances overall window quality



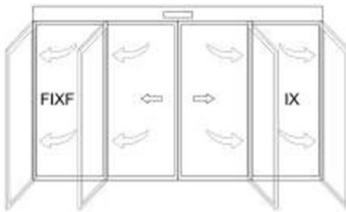
Types Of Aluminum Works

AUTOMATIC DOOR SERIES

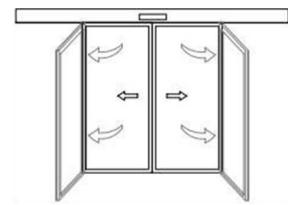
EMERGENCY SLIDING DOOR SERIES



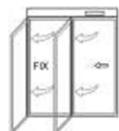
Description	Parameter(mm)
Width Of Sliding Panel	800~3000
Door Height	2100-3000
No. of Slidable Panel	1 or 2 panels
Emergency Exit Door	2 or 4 panels



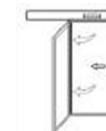
Double Translation Four Automatic Escape Doors



Single Horizontal Double Automatic Escape Door



Double Translation Double Automatic Escape Door



Double Open Four Panning Doors



Dunker

Motoren



Development Capabilities

Capabilities



Extra Long Warranty

Warranty

Security

Silent Track

Tailor-Made



Assembly Test



Technical Support



Easy To Install

Types Of Aluminum Works

80Z

**THERMAL BREAK
BI-FOLD DOOR**



6063 aviation - grade virgin aluminum

Resistant to corrosion, offers excellent durability and strength

Superior Thermal Insulation

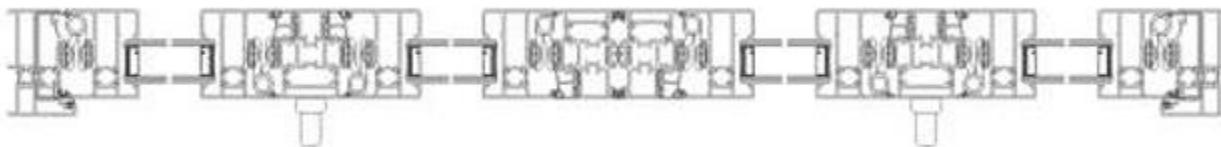
vertical isothermal line design and 20A - PA66 nylon thermal break strip

Outstanding Noise Reduction

Capable of achieving a noise reduction of over 40dB

Exceptional Sealing Performance with reinforcement mullion

Hidden Drainage System



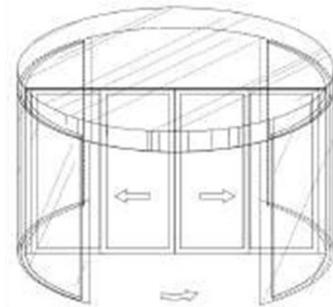
Types Of Aluminum Works

AUTOMATIC DOOR SERIES

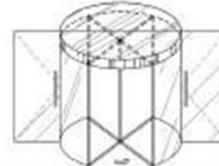
AUTOMATIC REVOLVING DOOR SERIES



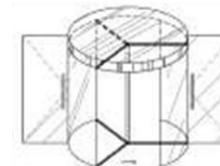
Description	Parameter
Style	2/3/4 wings revolving door
Door Panel Height	≤2500 mm
Min. Radius	≥1500 mm (Recommend)
Door Sill Height	300 mm
Door Frame Material	Stainless steel Aluminum alloy



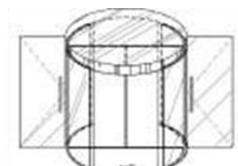
Double-wing Revolving Door And Sliding Door



Four-wings Revolving Door



Three-wings Revolving Door



Double-wing Revolving Door



Dunker
Motoren



Development
Capabilities



Extra Long
Warranty



Security



Silent Track



Tailor-Made



Assembly Test



Technical Support



Easy To Install

SunFrame Cooperation Letter



مودرن ميتالワークس
MODERN METAL WORKS

Date: [09/10/2025]

To: The Management of Sunframe.

China - KSA

Cooperation Letter

We, Modern Metal Works, are pleased to propose a Cooperation Letter with Sunframe to collaborate and share our experience and capabilities in the metal and facade industries.

We believe that by combining our strengths, we can deliver better solutions, expand opportunities, and achieve greater success together.

Thank you for considering this proposal. We look forward to a fruitful collaboration.

Sincerely,

General Manager

Eng. Kenan Ramadan



CR: 7050493530
0124224223 info@modern-mw.com
Ahmed Zaiad Al-Saleemah, Jeddah 7626

Joint Ventures (ALFATECH)

Founded in 2003, ALFATECH is a leading Saudi-based company specializing in aluminum facades, windows, doors, skylights, domes, and cladding.

With a strong presence in both local and international markets, ALFATECH is recognized for delivering innovative, high-quality aluminum solutions that enhance building aesthetics, functionality, and sustainability.

With a robust portfolio of projects across Saudi Arabia and beyond, ALFATECH has collaborated with top developers, architects, and contractors.

The company is known for its reliable, customized solutions and a strong track record of customer satisfaction.

List Of Machineries

Machinery and Equipment – Fabrication	
Protection Tape Machine	2 No.
Automatic Cutting Machine Saw Dia 380mm	5 No.
Automatic Double saw Cutting Machine Saw Dia 420mm	2 No.
Double saw Cutting Machine Saw Dia 400mm	2 No.
Automatic Double saw Cutting Machine Saw Dia 500mm	1 No.
Cladding Cutting Machine CNC 13m	1 No.
Cutting Saw Machine	1 o.
Drilling Machine	5 Nos.

List Of Machineries

New Machinery and Equipment – Fabrication	
Automatic CNC machining center with 4 controlled axis machine	1 No.
Automatic Cutting Machine with Automatic adjustable feeding system	1 No.
Advanced & High speed CNC Router for composite panels	1 No.
NC Hydraulic press brake	1 No.

List Of Machineries

<u>Machinery and Equipment – Fabrication</u>	
End Milling Machine	3 No.
Milling Machine	2 No.
Crimping Machine	2 No.
Bending Machine	1 No.
Sheet Bending Machine	1 No.
Hydraulic Notching Machine	9 No.
Punching Machine	4 No.
	1 No.
Panel Rolling Machine	1 No.
Air Compressor (Cobafer)	2 Nos.
Press Drill	35 Nos.
Welding Machine (Miller)	10 Nos.

List Of Machineries

<u>Machinery and Equipment – Transportation and Handling</u>	
Buses	2 Nos.
Pickup (3.5 Tons)	5 Nos.
Double Cabin Pickup	7 Nos.
Boom Crane	2 No.
Cradles	25 Nos.
Scaffoldings	2000 m²

Joint Ventures (KIN LONG)

Founded in **2003**, **KINLONG** is a leading company in the **construction hardware industry**, and the **first A-share listed company** in this field (2016).

The company focuses on **innovation, manufacturing excellence, and customer satisfaction**, offering **comprehensive solutions** for modern construction needs.

With strong **R&D capabilities**, advanced systems, and a wide supplier network, **KINLONG** provides **high-quality, reliable products** and **one-stop solutions** that adapt quickly to market demands.

KINLONG Joint Venture



مودرن ميتال ووركس
MODERN METAL WORKS

Date: [08/10/2025]

To: The Management of Kin-Long.
China

Joint Venture Proposal

We, Modern Metal Works, are pleased to propose a Joint Venture with Kin-Long to collaborate and share our experience and capabilities in the metal and façade industries.

We believe that by combining our strengths, we can deliver better solutions, expand opportunities, and achieve greater success together.

We look forward to meeting with you soon to discuss the details of this partnership, including roles, resource sharing, and other requirements.

Thank you for considering this proposal. We look forward to a fruitful collaboration.

Sincerely,

General Manager

Eng. Kenan Ramadan

Eng. Kenan



Kin-Long Management



CR : 7050493530
0124224223 info@modern-mw.com
Ahmed Zaiat, Al Salamah, Jeddah 7626

Joint Ventures (MAX BEAM)

Max Beam was established to deliver innovative and high-quality solutions in the construction and finishing sector, with a strong commitment to efficiency, precision, and excellence.

Since its inception, the company has positioned itself as a trusted partner, providing end-to-end services from design to final implementation through advanced technical expertise and a skilled professional team.

With a clear vision to become a leading supplier of **metal, glass, and architectural systems**, Max Beam has evolved from component supply and manufacturing into offering complete **one-stop solutions** — including design, fabrication, installation, and post-delivery support.

The company's diverse portfolio spans residential, commercial, educational, and industrial projects, consistently upholding the highest standards of quality, safety, and durability.



MAX BEAM Joint Venture



Date: [06/10/2025]

To: The Management of Max Beam

UAE - Dubai

Joint Venture Proposal

We, Modern Metal Works, are pleased to propose a Joint Venture with Max Beam to collaborate and share our experience and capabilities in the metal and facade industries.

We believe that by combining our strengths, we can deliver better solutions, expand opportunities, and achieve greater success together.

We look forward to meeting with you soon to discuss the details of this partnership, including roles, resource sharing, and other requirements.

Thank you for considering this proposal. We look forward to a fruitful collaboration.

Sincerely,

General Manager



Max Beam Management



CR: 7050493530
0124224223 info@modern-mw.com
Ahmed Zaiad Al-Salamah, Jeddah 7628

Joint Ventures (Structure Style)



Structure Style was established with a clear vision to lead in the field of **aluminum façade systems and architectural cladding solutions**.

The company specializes in designing, manufacturing, and installing high-performance aluminum façades that combine modern aesthetics with engineering precision.

Since its foundation, Structure Style has built a solid reputation as a trusted partner for developers, consultants, and contractors, providing customized solutions that meet the highest international standards of **quality, safety, and durability**.

Backed by a team of skilled engineers and advanced fabrication facilities, the company delivers comprehensive **turnkey façade solutions** — from concept design and structural analysis to fabrication, installation, and post-project support.

Through its continuous commitment to innovation and excellence, **Structure Style** continues to play a vital role in shaping the architectural landscape with elegant, efficient, and sustainable aluminum façade systems.



STRUCTURE STYLE
FOR ALUMINIUM

STRUCTURE STYLE Joint Venture



مودرن ميتال ووركس
MODERN METAL WORKS

Date: [06/10/2025]

To: The Management of Structure Style

UAE - Dubai

Joint Venture Proposal

We, Modern Metal Works, are pleased to propose a Joint Venture with Max Beam to collaborate and share our experience and capabilities in the metal and façade industries.

We believe that by combining our strengths, we can deliver better solutions, expand opportunities, and achieve greater success together.

We look forward to meeting with you soon to discuss the details of this partnership, including roles, resource sharing, and other requirements.

Thank you for considering this proposal. We look forward to a fruitful collaboration.

Sincerely,

General Manager



Structure Style Management



CR : 705049355
0124224223 info@modern-mw.com
Ahmed Zaia, As Salaman, Jeddah 7620

6-Cooperation letters

ALFATECH Cooperation Letter



مودرن ميتالワークس
MODERN METAL WORKS

Date: [11/10/2025]

To: The Management of AlfaTech.

Jeddah - KSA

Cooperation Letter

We, Modern Metal Works, are pleased to propose a Cooperation Letter with AlfaTech to collaborate and share our experience and capabilities in the metal and façade industries.

We believe that by combining our strengths, we can deliver better solutions, expand opportunities, and achieve greater success together.

Thank you for considering this proposal. We look forward to a fruitful collaboration.

Sincerely,

General Manager
Eng. Kenan Ramadan

AlfaTech Management
Eng. Anas Sulaybi



CB 7050493530
0124224223 info@modern-mm.com
Anmaa Zain Al-Saleem Jindan Tabb

Cooperation letters with our Suppliers



شركة المواد الخصوصية للكيماويات (شركة شخص واحد)
Specialities Materials Chemicals Company (One Person Company)

Dears/Modern Metal Works Co.

OCT 8th 2025

Dear Sir,

We are pleased to inform you of our acceptance to supply our products to your esteemed company as per your request for the approved projects.

We have no objection to proceeding with the supply and look forward to cooperating with you to meet your requirements with the highest quality and within the agreed terms and conditions.

Thank you for your trust and cooperation.

With best regards.

SPECIALITIES MATERIALS CHEMICALS COMPANY (ONE PERSON COMPANY)



Kanoo Building 1 - 3rd floor - Madinah Road
Tel. +966 12 2036237 - Fax +966 12 263 2901
Jeddah - Kingdom of Saudi Arabia
L.L.C. C.R. 4030408296
VAT No. 310892249900003

مكتب كانو ١ - الدور ٣ - مادينه المدينه
هاتف: +٩٦٦ ١٢ ٢٠٣٦٢٣٧ - فاكس: +٩٦٦ ١٢ ٣٦٣٦٩١٦
جدة - المملكة العربية السعودية
إ.س.م: س.م.ع.م.ك.ر. ٤٠٣٠٤٠٨٢٩٦
إ.ر.ك.م: ٣١٠٨٩٢٢٤٩٩٠٠٣



Bringing it together.

EJOT Limited Co.
Kingdom of Saudi Arabia

10/09/2025

Subject: Confirmation of Supply and Cooperation

Dears /Modern Metal Works Co.,

We are pleased to inform you of our acceptance to supply EJOT products to your esteemed company as per your request for the approved projects.

We have no objection to proceeding with the supply and look forward to cooperating with you to fulfill your requirements with the highest quality and within the agreed terms and conditions.

Thank you for your trust and cooperation.

Sincerely,
EJOT Saudi Arabia



Cover letters with our Suppliers



Dears /Modern Metal Works Co.

We are pleased to inform you of our acceptance to supply our products to your esteemed company as per your request for the approved projects.

We have no objection to proceeding with the supply and look forward to cooperating with you to meet your requirements with the highest quality and within the agreed timelines.

Thank you for your trust and cooperation.

With best regards,

[Saudi Rockwool Factory]

[Ahmad Tareq / Sales Engineer]

[7/10/2025]

[Signature & Stamp]



شركة مجال التثبيت التجارية
TECHNOFIX TRADING COMPANY

Att.: Modern Metal Works Company

Subject: Confirmation of Acceptance to Supply Products and Services

Dear Modern Metal Works Company,

We are pleased to confirm our acceptance to supply our products, along with technical and commercial support and services, to your esteemed organization, in line with your request for the approved projects.

We have no objection to proceeding with the supply and are committed to working closely with you to fulfill your requirements with the highest standards of quality and within the agreed timelines.

Thanks

Best Regards,

Technofix Company,

Eng. Yahya Shawar,

Chief Executive Officer

Dated: 13-10-2025



www.technofixksa.com

info@technofixksa.com

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Our Partners



STRUCTURE STYLE
FOR ALUMINIUM





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**MODERN
METAL WORKS**

