

NOVAL GLASS

PRODUTS FOR AUSTRALIA

LAMINATED GLASS

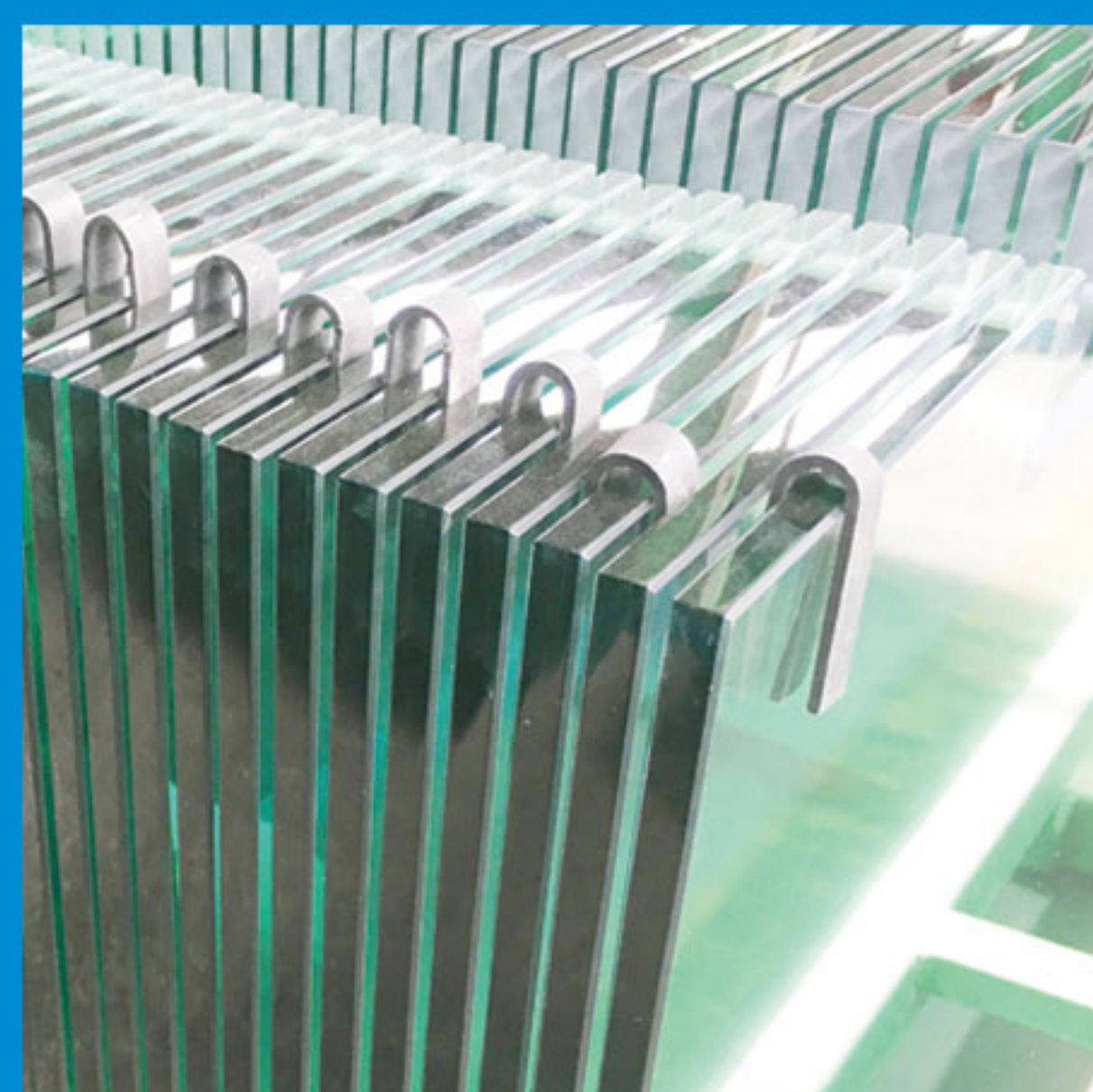
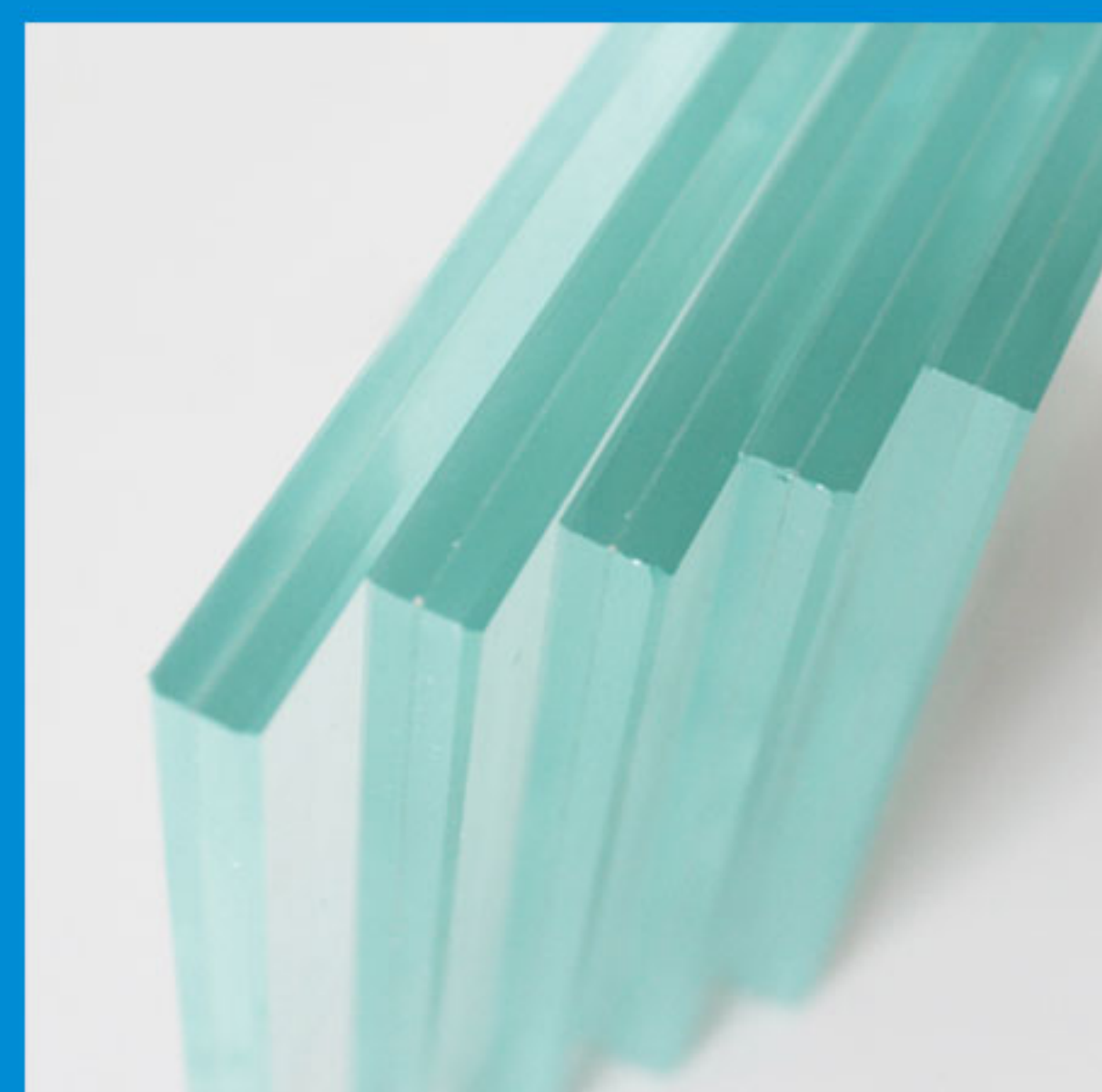
Clear & Tinted Laminated Glass
Acoustic Laminated Glass
Low-E Laminated Glass
Cathedral Laminated Glass

MIRROR

Silver Mirror, Copper Free Mirror
Epoxy Copper Free Mirror
Paint Glass, Aluminum Mirror
Vinyl Back Mirror & Paint Glass
One-way Mirror, Temperable Mirror

TEMPERED GLASS

Tempered Glass Panel
Shower Screen
Pool Fencing System



ABOUT US

WHO WE ARE

Noval Glass is a highly professional Glass & Mirror supplier from China.

Owing to 12 years' exporting experience, Noval Glass has become China Leading glass and mirror supplier with Strong Technical Support, Rich Experience, Huge Productivity and Strict Quality Control. Noval has been exporting thousands of Glass & Mirror to all over the world for construction, residential, decoration and home furnishing.

WHAT WE OFFER

With full range of Laminated Glass & Mirror products, Noval offers one-stop purchase at most competitive price.

Our featured products include All kinds of laminated glass (Color laminated, Acoustic laminated, Cathedral laminated, Low-e laminated and so on), Vinyl back Mirror, Copper Free Mirror, Vinyl back Painted Glass and so on.

HOW WE DO

Noval Glass always focuses on Laminated Glass & Mirror quality. Strict QC allows no defect Laminated Glass & Mirror to be delivered. Standard Size, Customize dimension, cut or grinded edge, round or square shape, Clean or LOGO mark, all requirements are available in Noval Glass.

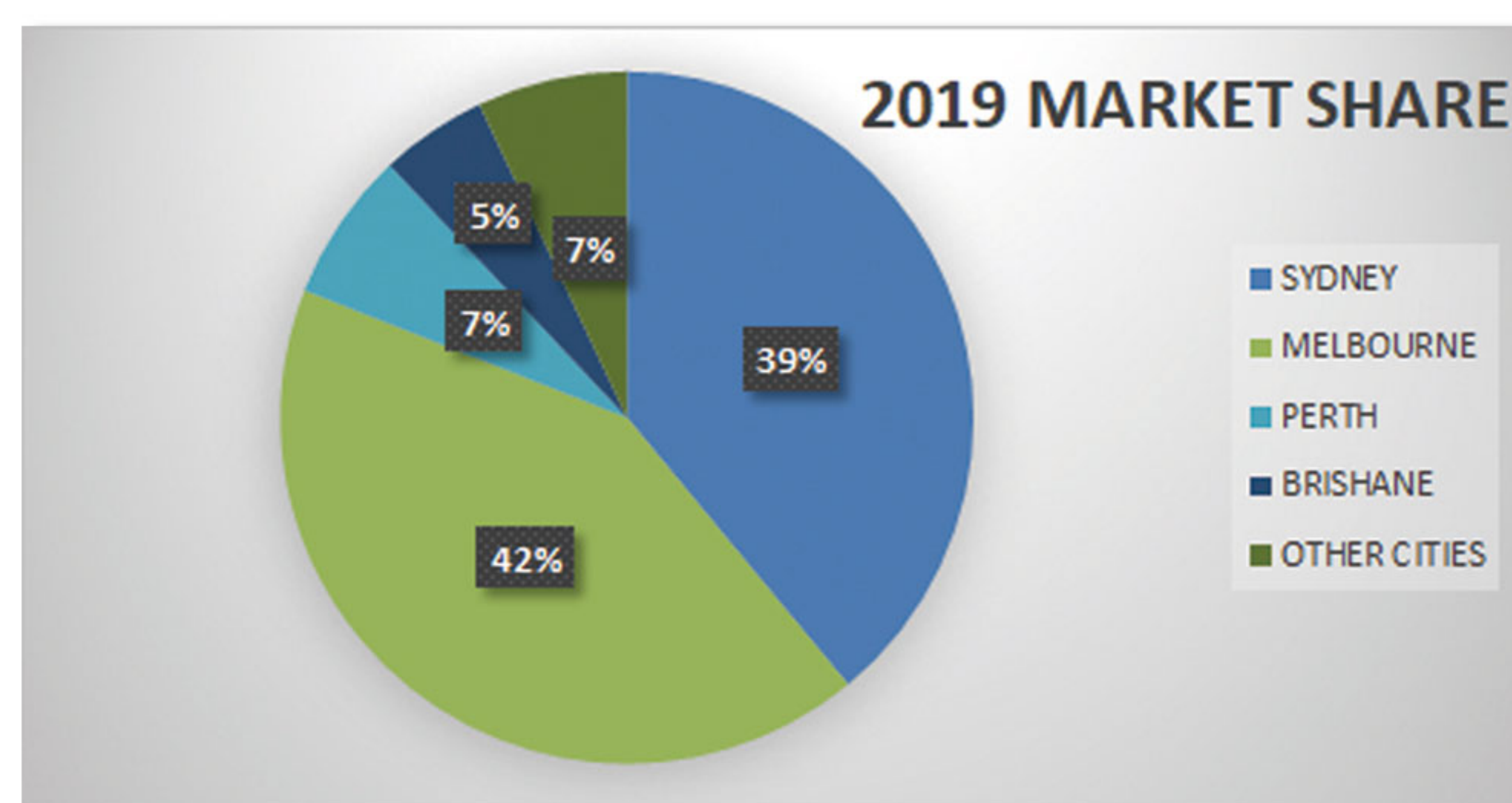
Noval's sales team is always offering excellent service for our customers. Every detail will receive Noval's full attention. Every personalized requirement will receive Noval's utmost efforts. Every confusion and difficulty will receive Noval's corresponding solution.

With all the products and service, Noval Glass is dedicated to make all your business and purchasing much more smooth and easy. The ultimate aim of Noval Glass is to offer most suitable and favorable solutions for all our customers

MARKET DEVELOPING

Noval Glass has been focusing on Australia market for more than 12 years, we export all kinds of product which suitable to this market, and there are an annual growth rate of 20%, and the main market is Sydney and Melbourne in 2019, we are expanding to other more cities.

All on the basis of NOVAL GLASS CERTIFICATE OF CONFORMANCE AS NZS 2208 (2020) FOR AUSTRALIA MARKET.



LAMINATED GLASS

INTRTODUCTION

Noval Glass Laminated Glass is made up of two or more sheets of glass bonded together with a clear or colored polyvinyl butyral (PVB) interlayer. After the plastic has been placed between the glass sheets, the whole assembly is subjected to heat and pressure.

This results in the complete adhesion of the vinyl and the glass. In the event of breakage, the glass fragments remain bonded to the PVB. If the glass breaks, the fragments of glass are held in place by the PVB interlayer(s). In fully framed installations the broken glass retains residual strength while awaiting replacement.

SPECIFICATION

Color:	Clear, Ultra Clear, Milky White, Bronze, Grey, Green, Blue, Acoustic etc...
Thickness:	3+0.38(0.76) +3mm, 4+0.38(0.76) +4mm, 5+0.38(0.76) +5mm, 6+0.76(0.38) +6mm, 8+0.76(0.38) +8mm etc...
Regular Size:	2440*1830mm, 3300*2140mm, 3300*2250mm, 3300*2440mm, 3660*2140mm, 3660*2250mm, 3660*2440mm.
Australia Size	3050*2140mm, 2860*2140mm, 2800*2140mm, 2800*1380mm, 2800*1220mm, 2800*1070mm, 2800*920mm, 2800*800mm, 2760*1220mm, 2760*1070mm, 2760*920mm, 2760*800mm, 2440*1380mm, 2440*1220mm, 2440*1070mm, 2440*920mm, 2440*800mm, 2140*1220mm, 2140*1070mm, 2140*920mm, 2140*800mm. Customized size are available to offer.

CLEAR & TINTED LAMINATED GLASS



Clear



Milky White



Bronze



Grey

LAMINATED GLASS PERFORMANCE

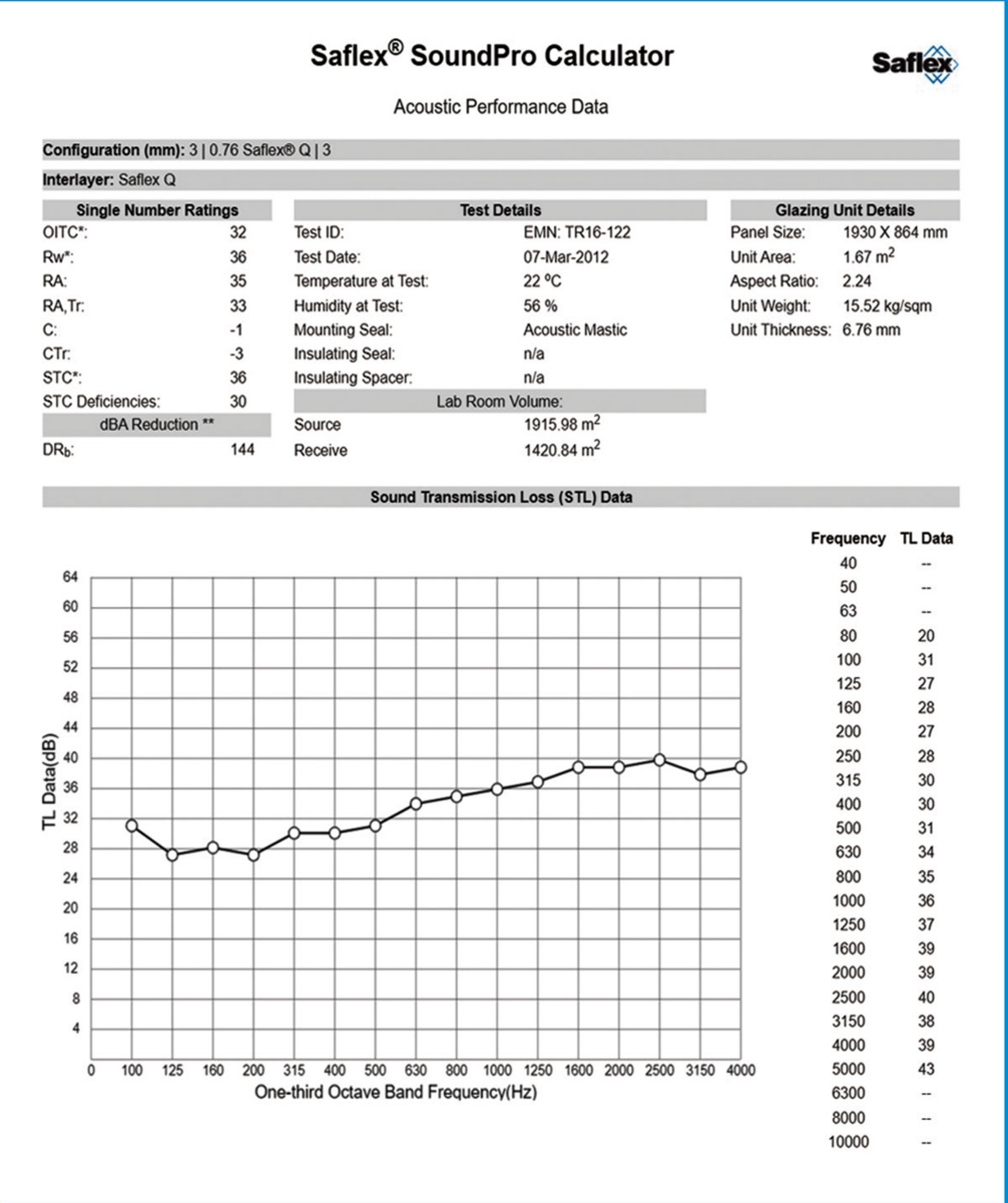
Visible	Visible Light			Solar Energy					Thermal Properties		Light to Solar Gain (LSG)
	Transmittance	Reflectance		Transmittance	Reflectance	Absorptance	SHGC	SC	U-Value		
	Visible (%)	Out (%)	In (%)	Solar (%)	Out (%)	Solar (%)			Winter Night	Summer Day	
6.38 Clear	89	8	8	77	7	16	0.81	0.94	5.74	5.21	1.09
6.38 Milky White	63	13	13	58	11	32	0.67	0.77	5.72	5.19	0.95

ACOUSTIC LAMINATED GLASS

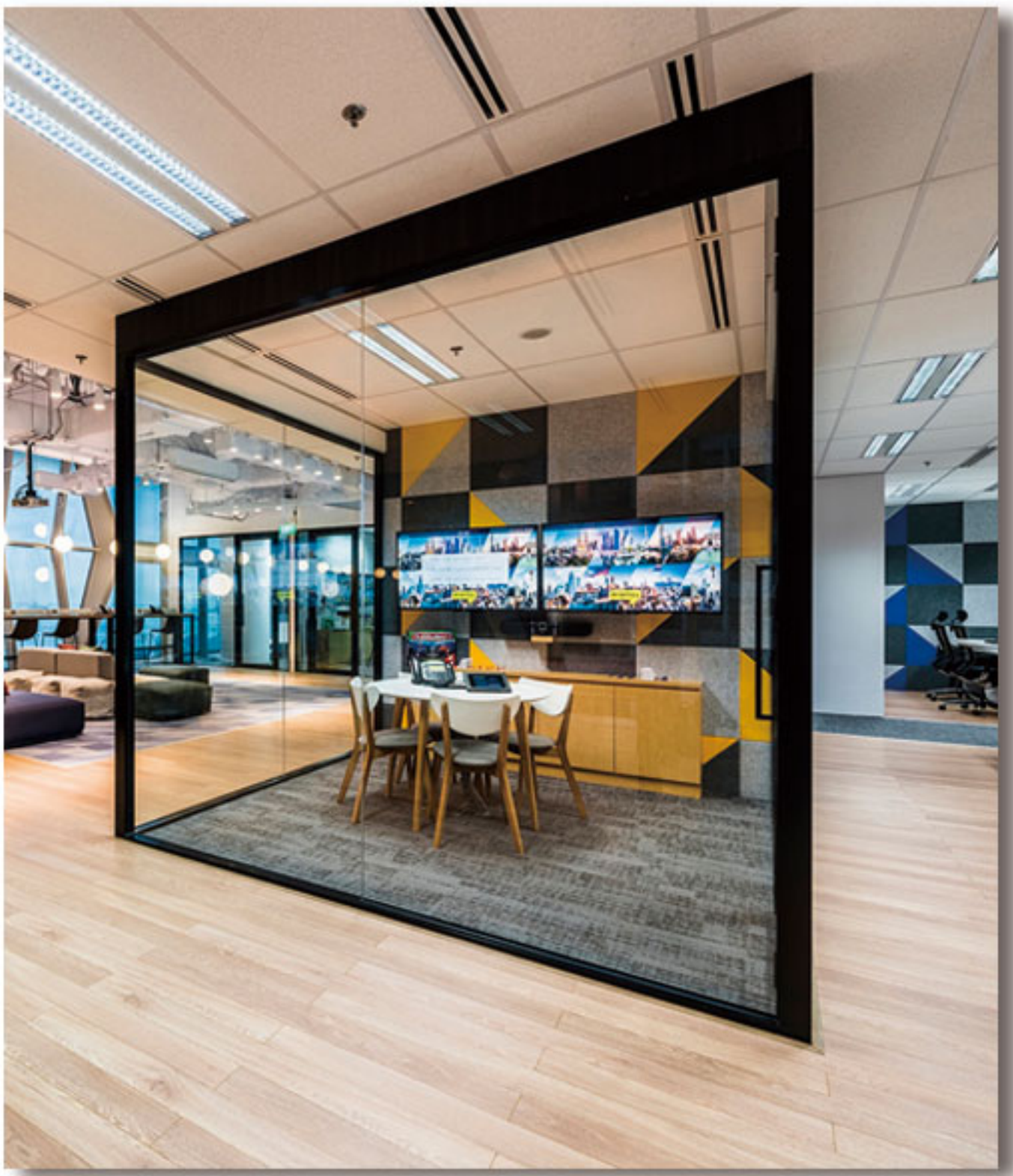
Noval Glass Acoustic Laminated Glass is special used for the place against noise, like office partition, interpreting booth, residential areas in close proximity to airport, towns or city centers, railway lines or motorways etc.

PVB Brand: Saflex from Eastman

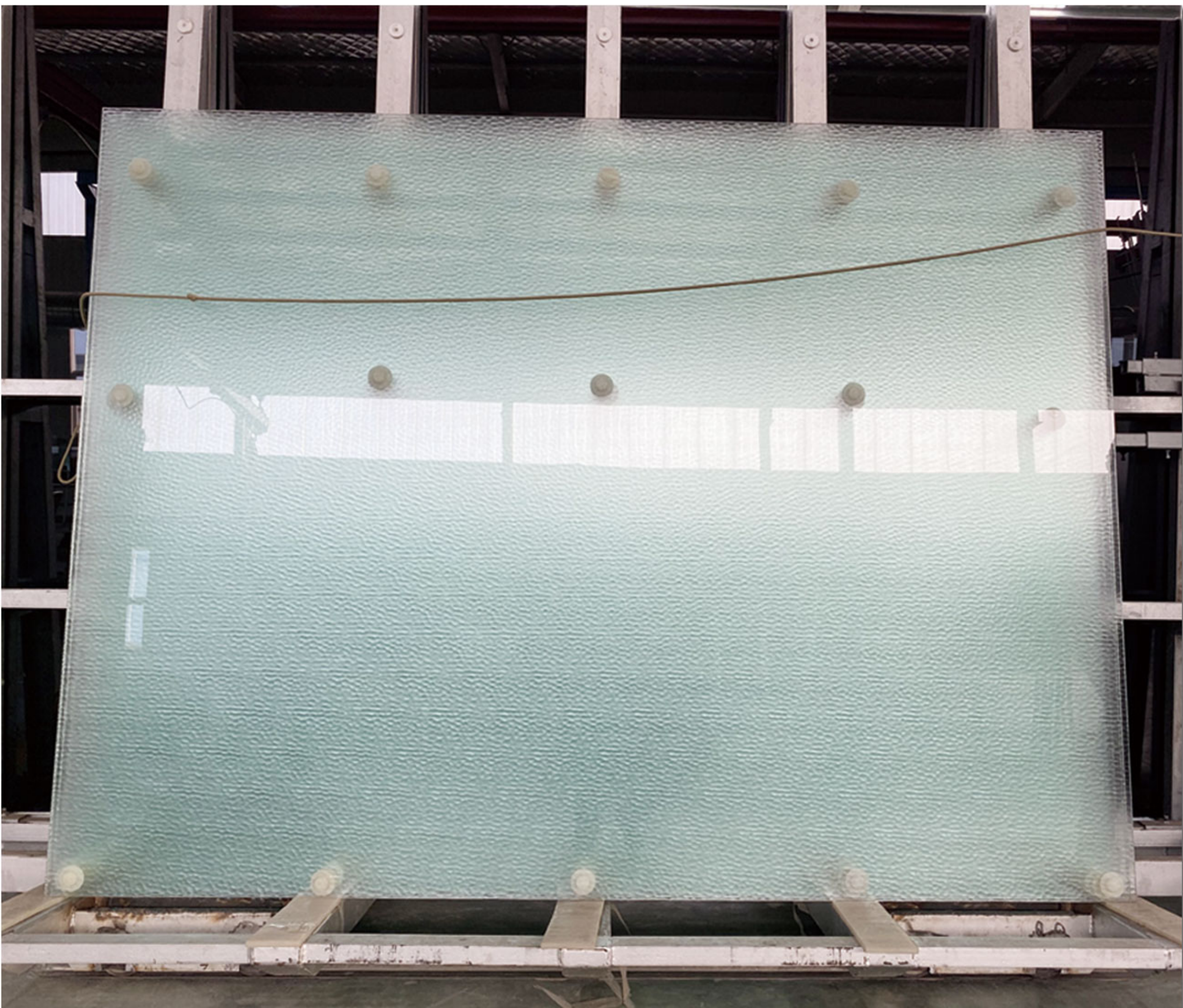
PVB Thickness: 0.76mm, 1.52mm etc.



POLISHED EDGE LAMINATED GLASS



CATHEDRAL LAMINATED GLASS



VINYL BACK MIRROR & PAINT GLASS

INTRTODUCTION

Noval Glass can offer all Mirror and Paint Glass solutions. For safety consideration we usually attach a protective film (vinyl back) on mirror. The vinyl back will prevent people from hurting when mirror broken. Noval Glass vinyl back comply with AS NZS 2208 (2020) for Australian market.

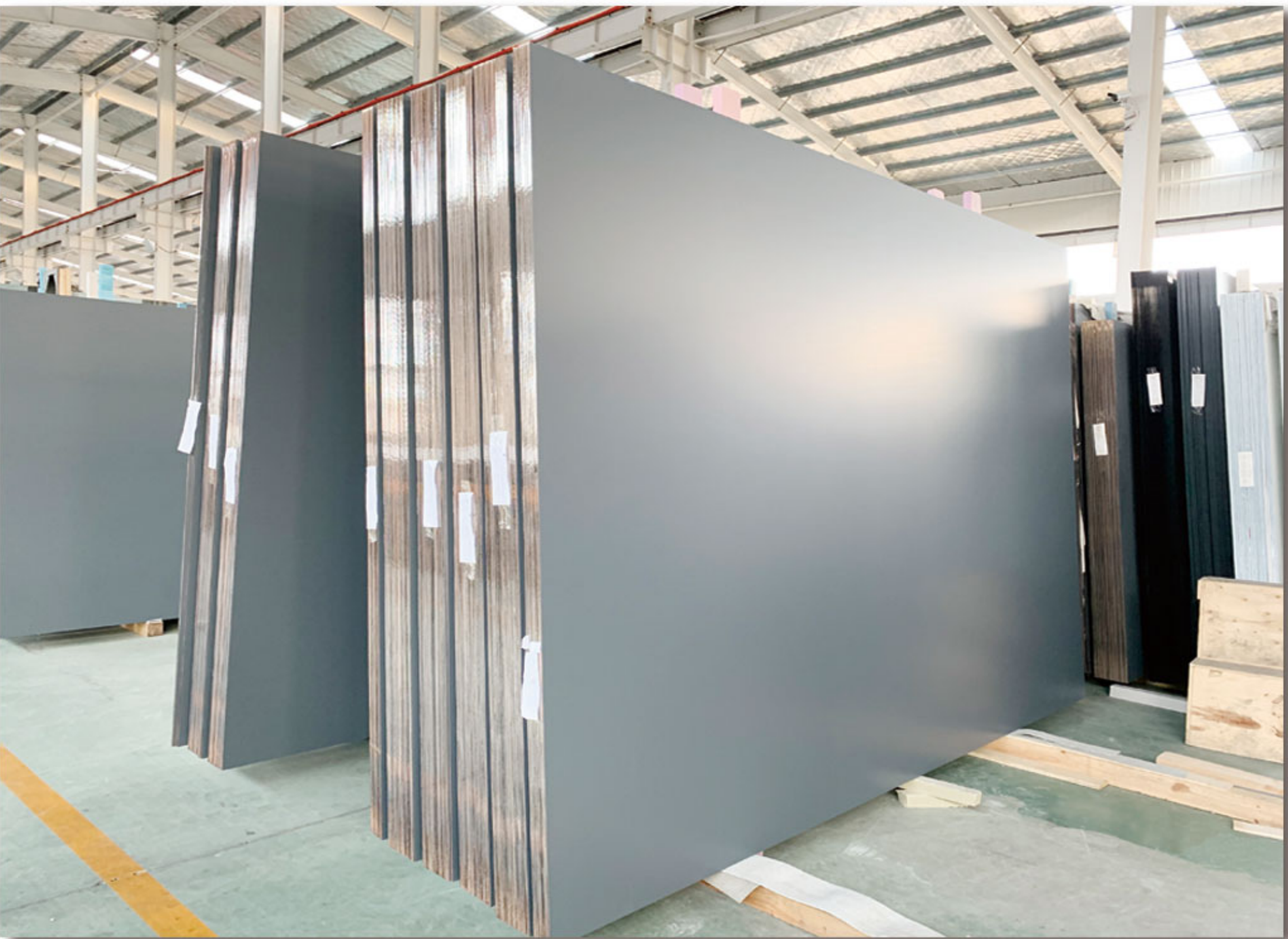
SPECIFICATION

- Type: Mirror & Paint Glass with Vinyl Back,
Copper Free silver Mirror, Epoxy Copper Free Silver Mirror,
Silver Mirror, Aluminum Mirror, Paint Glass.
- Color: Mirror: Clear, Ultra Clear, Gray, Bronze etc...
Paint Glass: White, Ultra Clear White, Black, Red, Ivory etc...
- Thickness: 3mm, 4mm, 5mm, 6mm
- Regular Size: 2440*1830mm, 3300*2140mm, 3300*2250mm, 3300*2440mm,
3660*2140mm, 3660*2250mm, 3660*2440mm.
- Australia Size: 3050*2140mm, 2860*2140mm,
2800*2140mm, 2800*1380mm, 2800*1220mm,
2800*1070mm, 2800*920mm, 2800*800mm,
2760*1220mm, 2760*1070mm, 2760*920mm, 2760*800mm,
2440*1380mm, 2440*1220mm, 2440*1070mm,
2440*920mm, 2440*800mm,
2140*1220mm, 2140*1070mm, 2140*920mm, 2140*800mm.
Customized size are available to offer.

COMPARISON OF DIFFERENT MIRROR

Mirror Type Item	Epoxy Copper Free Mirror	Copper Free Mirror	Silver Mirror	Aluminum Mirror
Reflection Rate	89%	89%	87%	85%
Silver Content	≥800mg/m²	≥800mg/m²	≥700mg/m²	0mg/m²
Copper Content	0mg/m²	0mg/m²	≥200mg/m²	0mg/m²
Paint Thickness	50~57µm	48~55µm	45~52µm	42~48µm
Paint Lead Content	≤20ppm	≤20ppm	≤170ppm	≤20ppm
Paint Mercury Content	≤60mg/kg	≤60mg/kg	≤60mg/kg	≤60mg/kg

SAFETY MIRROR & PAINT GLASS



VINYL BACK PRODUCTION & IMPACT TEST



Front before Impact



Film before Impact



Front after Impact



Film after Impact

ONE-WAY MIRROR

INTRTODUCTION

One-Way Mirror is a glass that has a high reflectance for visible light. In the weak light environment, you can clearly observe the things under the strong light environment through the One-Way Mirror. When in use, the reflecting surface faces the strong light surface or outdoor.

One-Way Mirror is widely used in interrogation rooms, identification rooms, psychological consultation rooms, teaching observation rooms, bars, behavior observation rooms, outdoor ecological rooms, toilets and etc...

SPECIFICATION

Max Size: 3660*2440mm
Thickness: 2mm to 12mm
Processing: Edgework, Drill, Tempered, Laminated, Insulated.

OPTICAL PARAMETERS

Reflecting Surface	Y=77.84	L=90.71	a=-4.06	b=-0.75
Glass Surface	Y=13.06	L=42.85	a=0.70	b=-4.24
Transmittance	Y=8.37	L=34.75	a=4.70	b=2.71



TEMPERABLE MIRROR

INTRTODUCTION

Temperable Mirror Glass is produced by advanced vacuum magnetron sputtering process, coating multi-layer films on high-quality low iron float glass, which has relatively ideal visible light reflectivity.

Noval Glass Temperable Mirror Glass has rich colors, gorgeous appearance, and convenient processability to provide excellent safety effects for modern buildings and home environments.

SPECIFICATION

Max Size: 3660*2440mm
Thickness: 2mm to 12mm
Color: Ultra Clear, Bronze, Grey, Blue Grey, Pink

OPTICAL PARAMETERS FOR ULTRA CLEAR

Reflecting Surface	Y=29.55	L=61.27	a=11.93	b=-13.66
Glass Surface	Y=67.21	L=85.61	a=-3.81	b=-1.46
Transmittance	Y=2.98	L=19.96	a=1.58	b=5.68

TEMPERED GLASS

INTRTODUCTION

Noval Glass Tempered Glass, also known as Toughened Glass, Safety Glass, is a heat toughened safety glass. It under goes a special heat treatment to provide significant increase of resistance to mechanical and thermal stresses than conventional annealed glass. When the glass breaks, it fragments safely into small pieces with dulled edges.

FEATURES & PERFORMANCE

GOOD SAFETY -- If the glass break, Tempered Glass considerably reduces the risk of injury as it fragments into small pieces with dulled edges.

GOOD IMPACT RESISTANCE -- Tempered Glass is approximately five times more resistant than normal anealed glass.

GOOD BENDING STRENGTH -- Tempered Glass is significantly more resistant to flexural stresses than conventional annealed glass. This resistance is characterized by a bending strength in the region of 120 Mpa.

GOOD THERMAL-RESISTANCE -- Tempered Glass can withstand temperature differences of up to 200 centigrade. For comparison, normal anealed glass 30 centigrade.

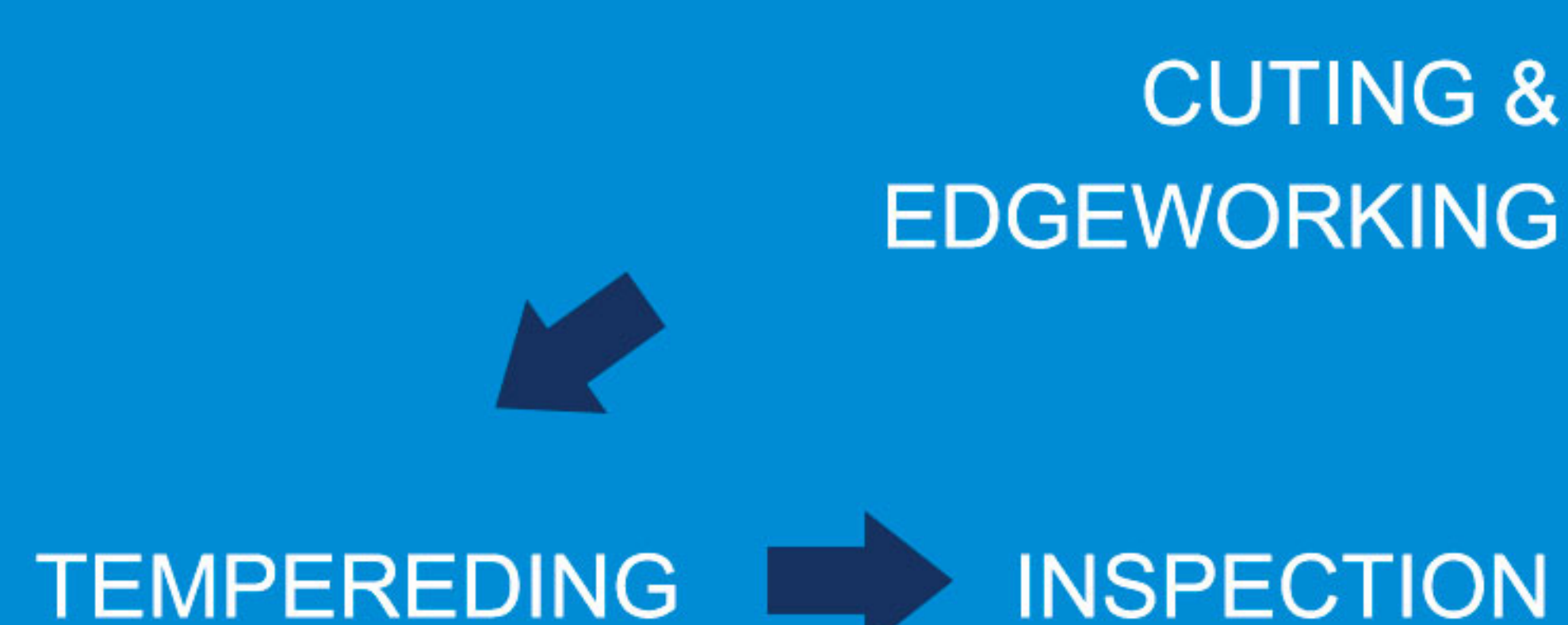
SPECIFICATIONS

Glass Type: Clear Glass, Low Iron Glass, Tinted Glass, Acid Etched Glass, Patterned Glass etc...

Thickness: 3mm, 4mm, 5mm, 6mm, 8mm, 10mm, 12mm, 15mm, 19mm

Regular Size: As per customers request. Max Size 3660*18000mm, Min Size 300*300mm.

PRODUCTION PROCESSING

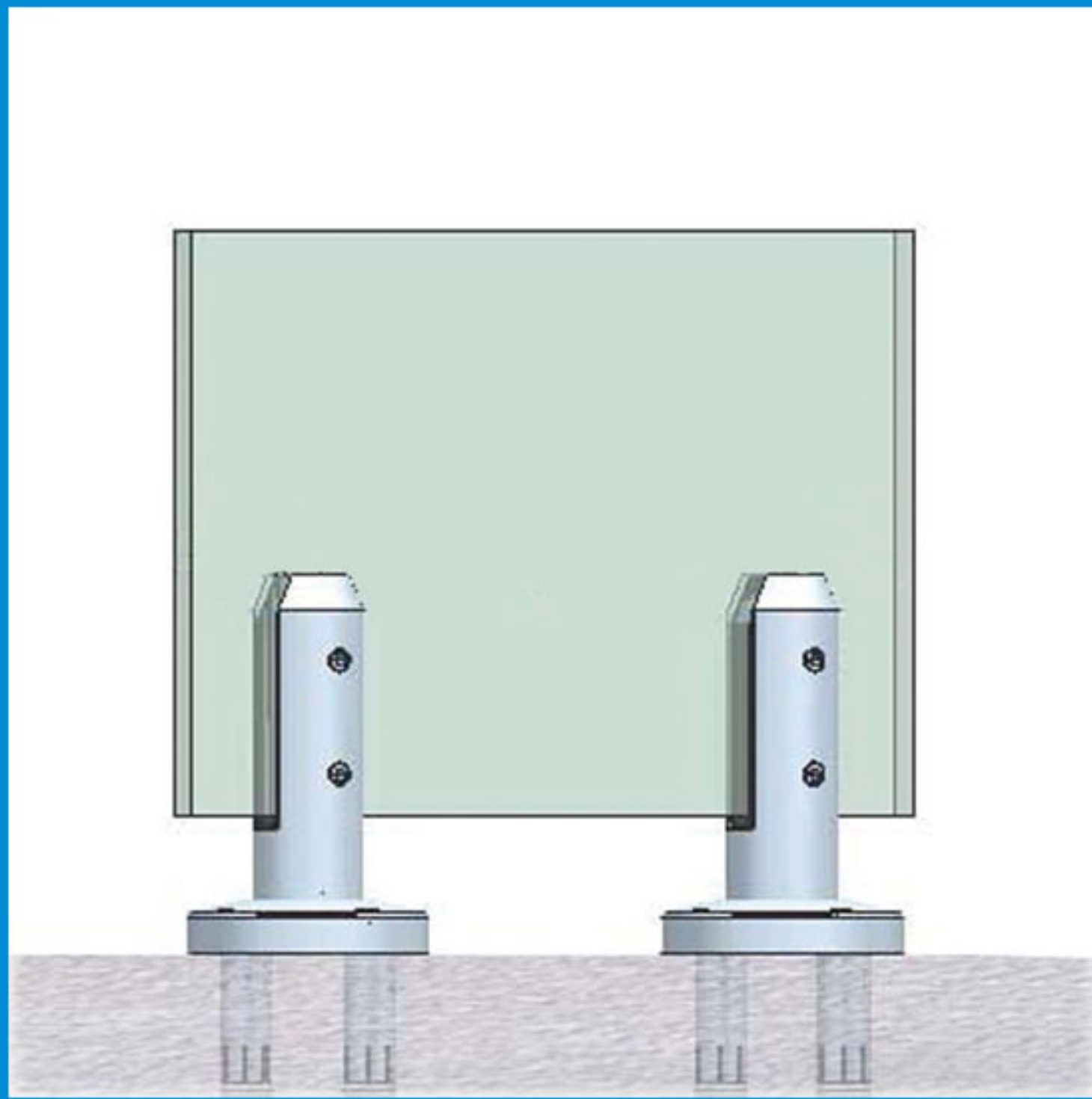


TEMPERED GLASS PANEL

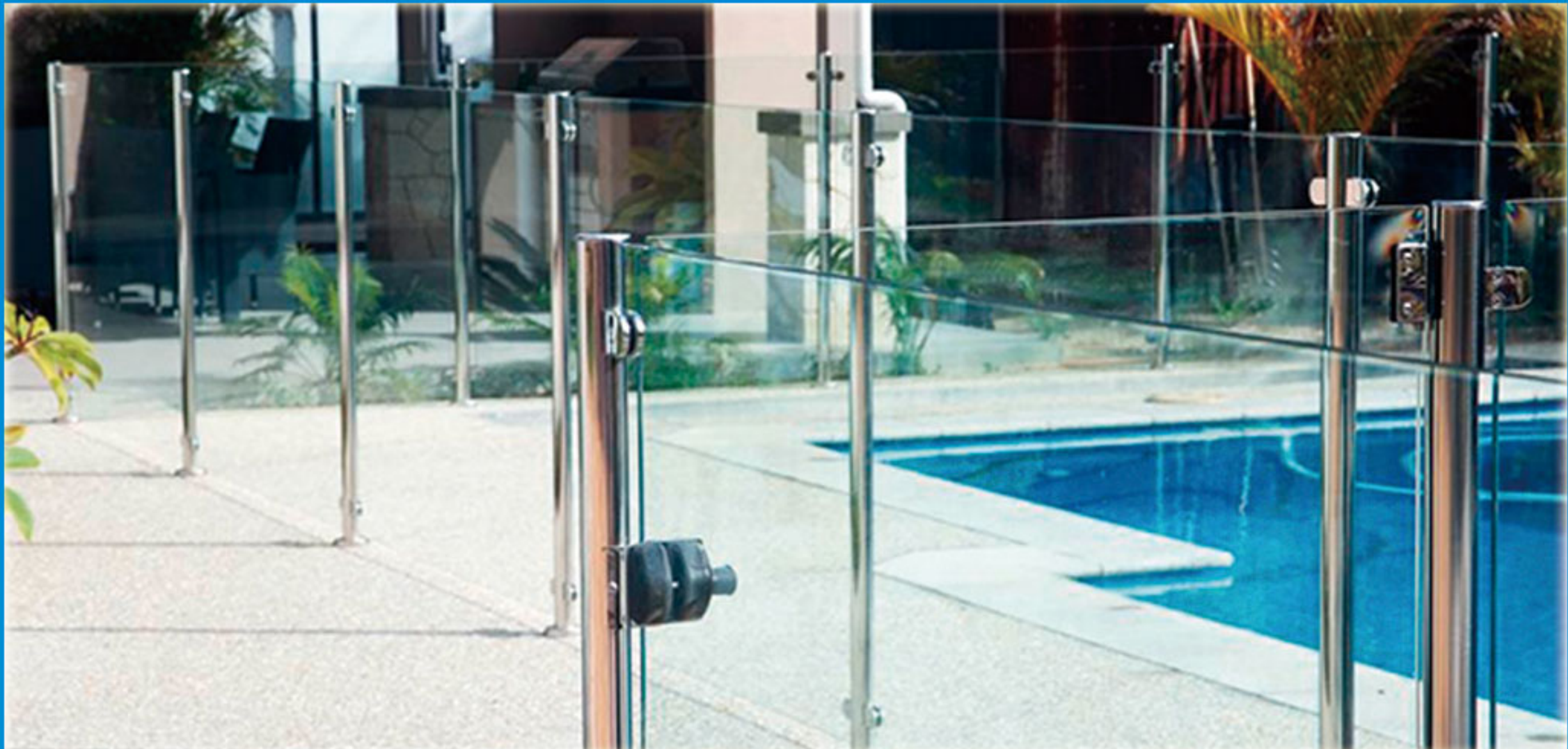
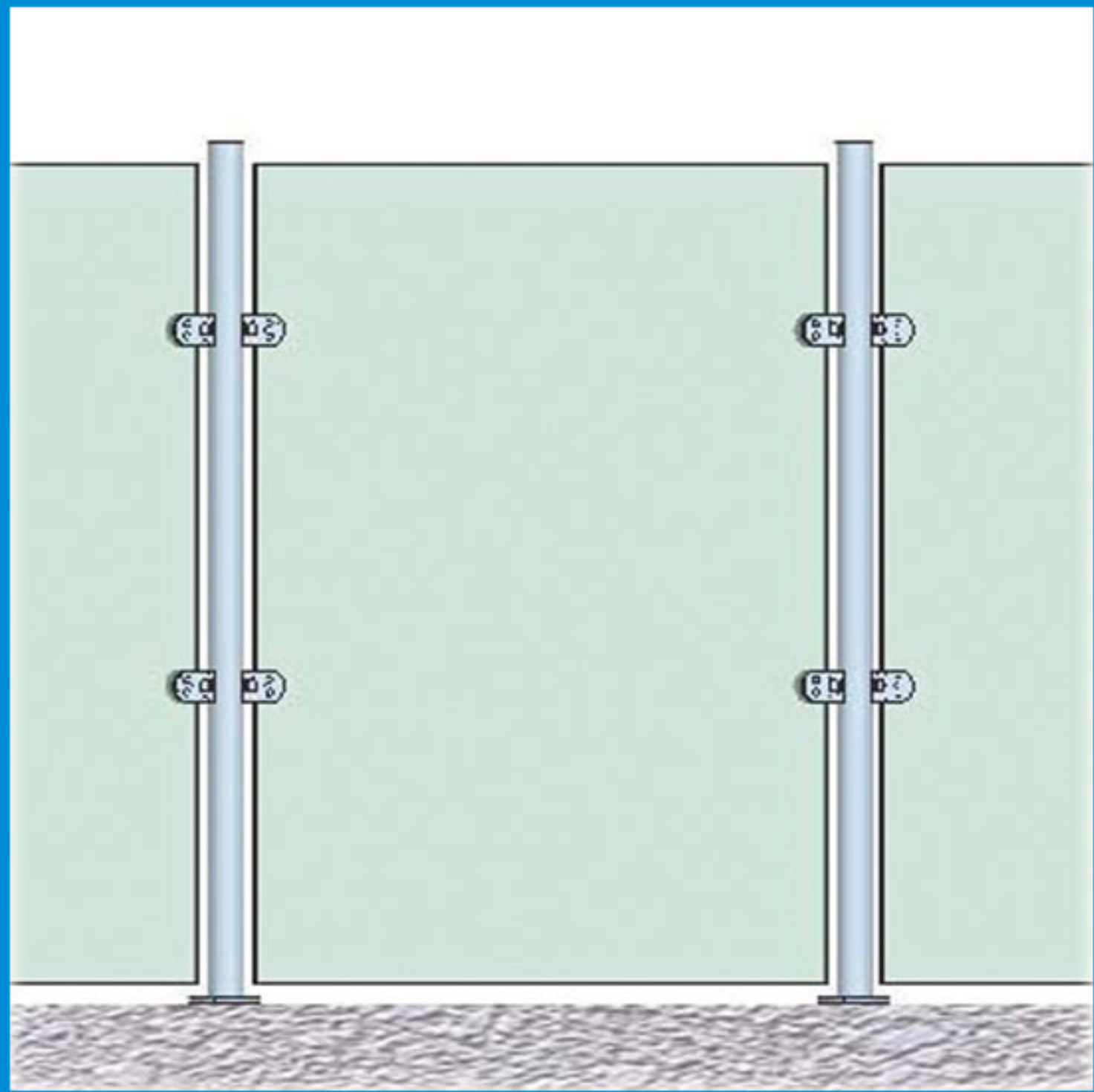


POOL FENCING SYSTEM

SPIGOT
SYSTEM

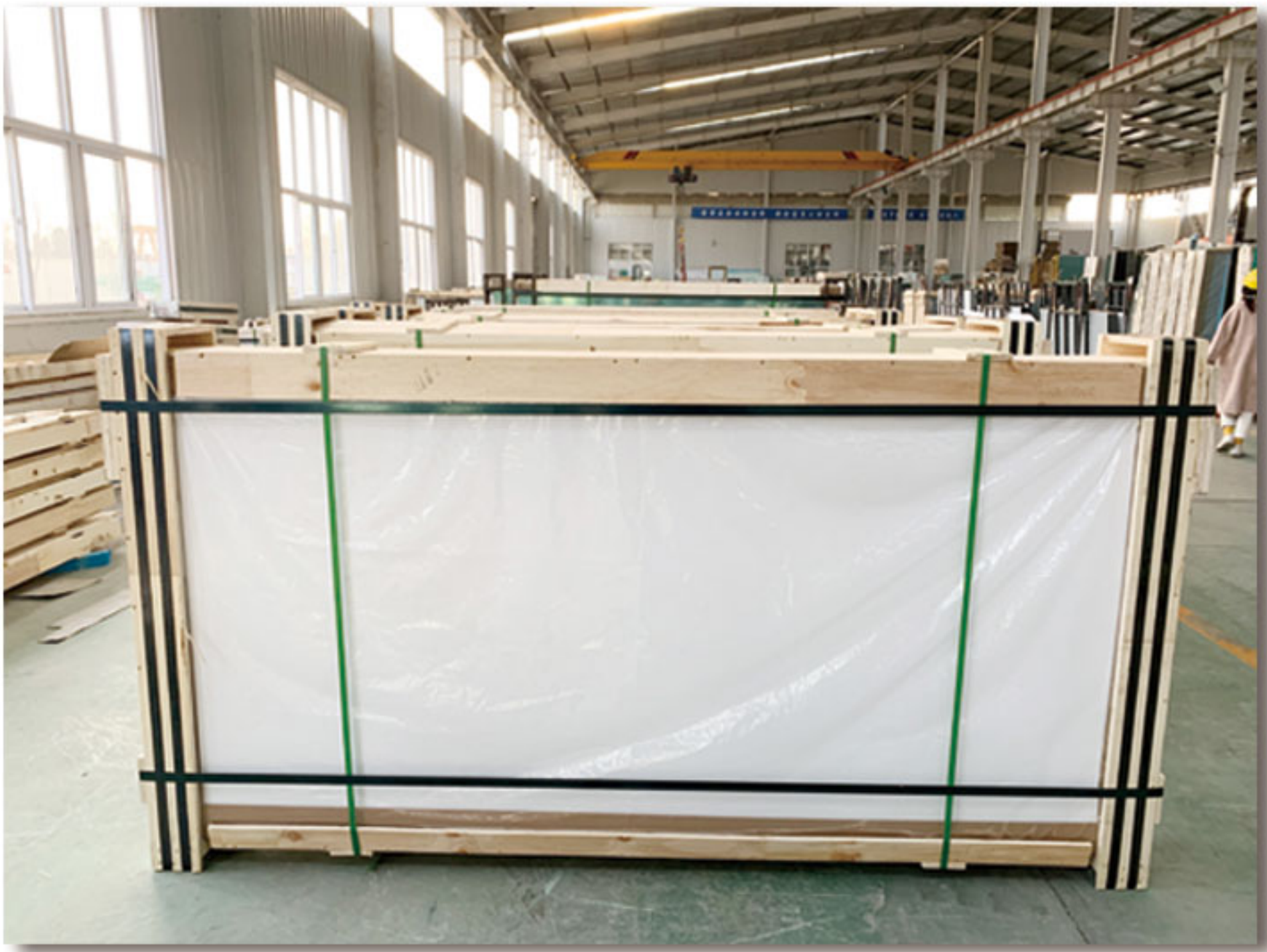
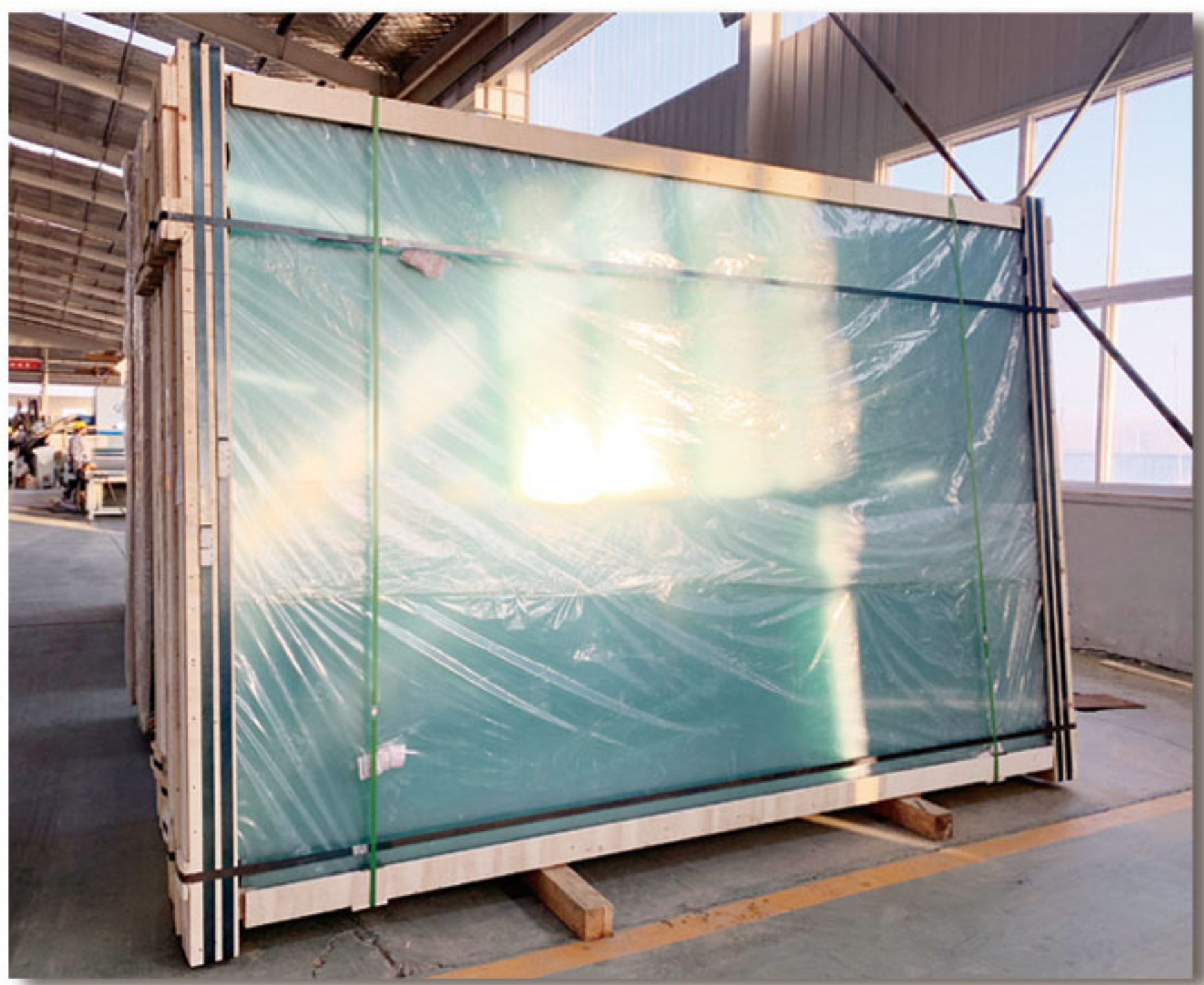


PILLAR
SYSTEM



PACKING &LOADING

WOODEN CRATE



IRON FRAME



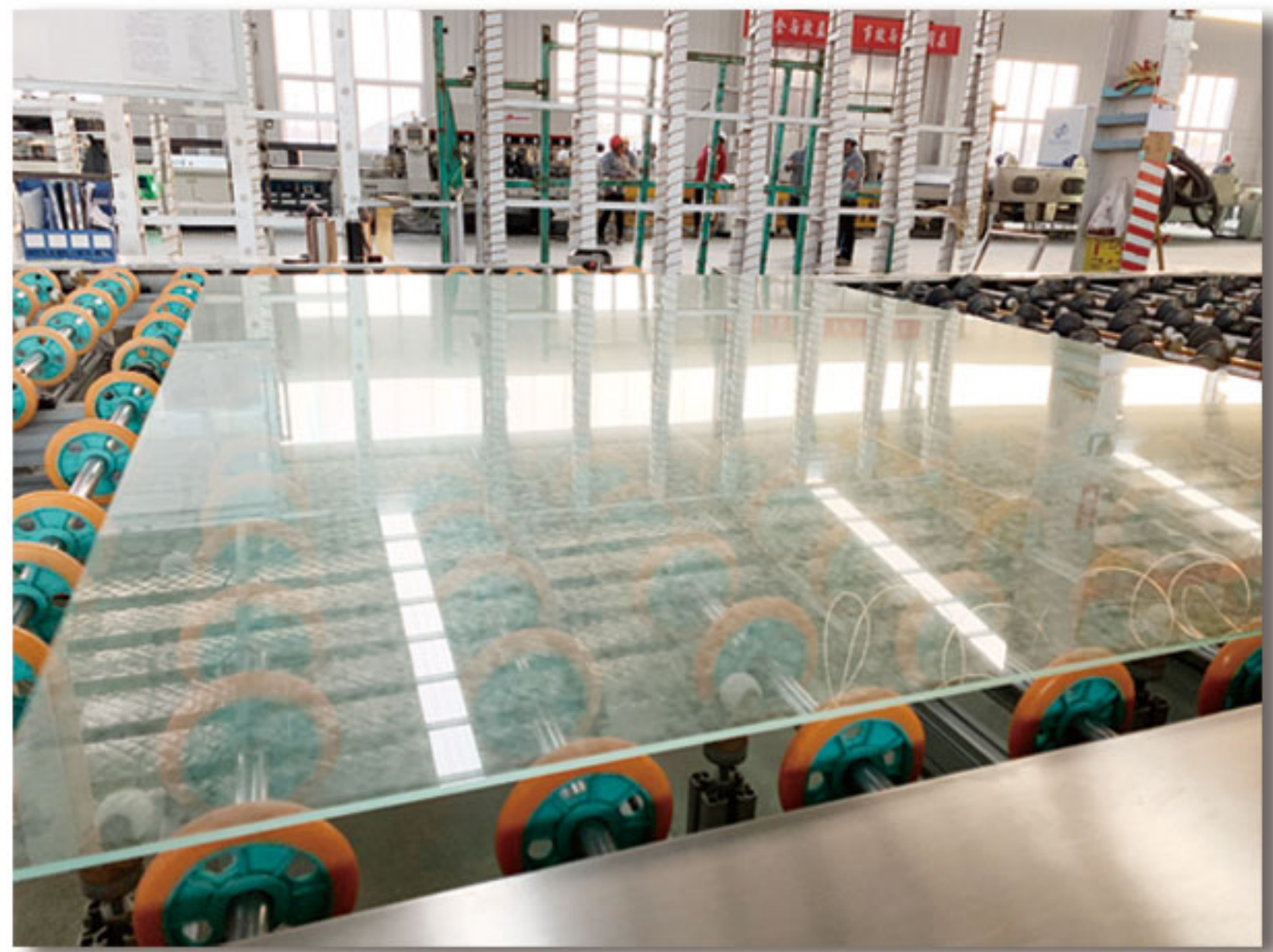
NAKED PACKING
LOAD ON A RACK



L RACK

PRODUCTION FACILITY

LAMINATED PRODCUTION LINE



EDGEWORK

SAFETY
FILM



MIRROR PRODCUTION LINE

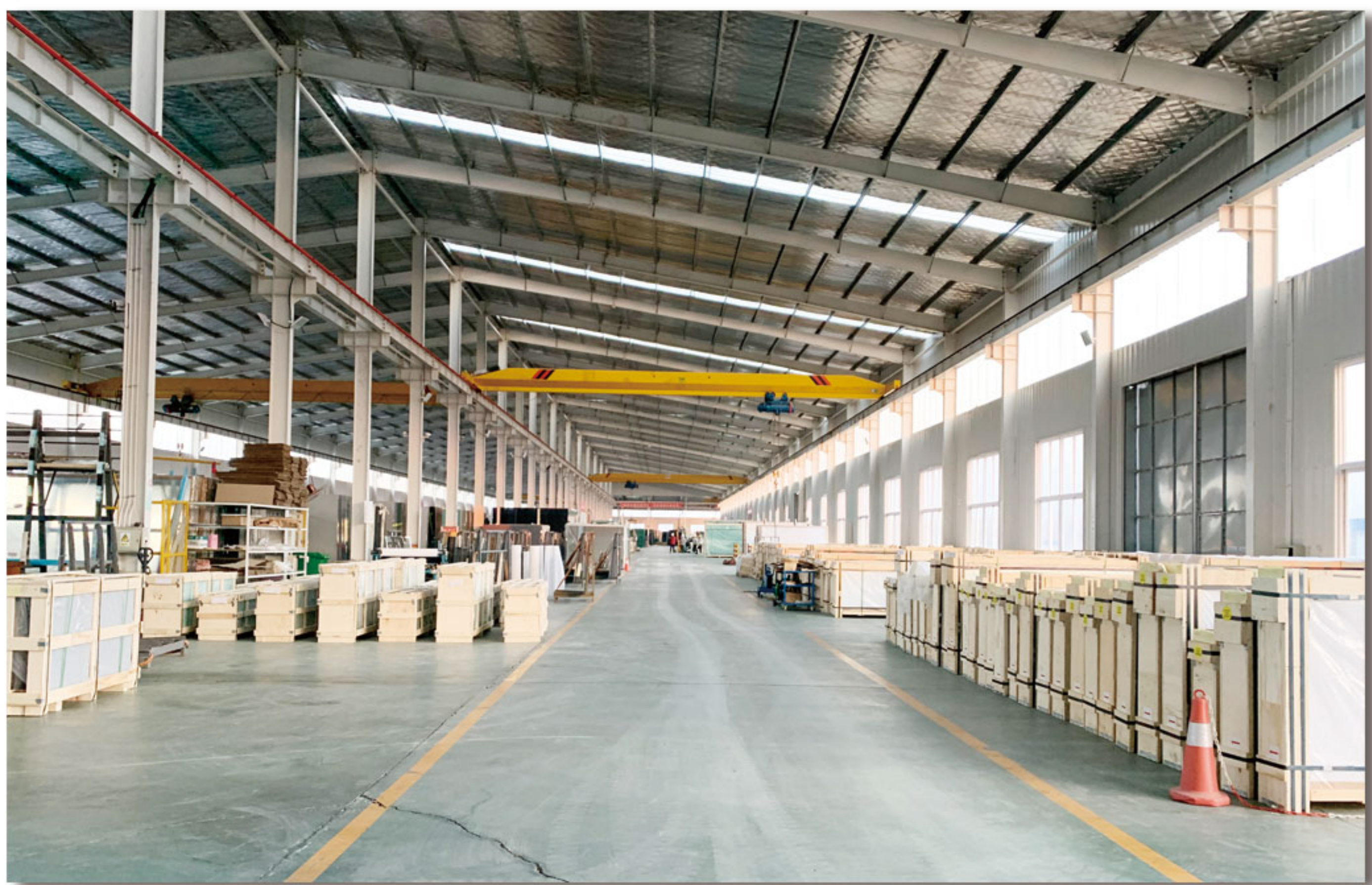


WORKSHOP



PRODCUTION
AREA

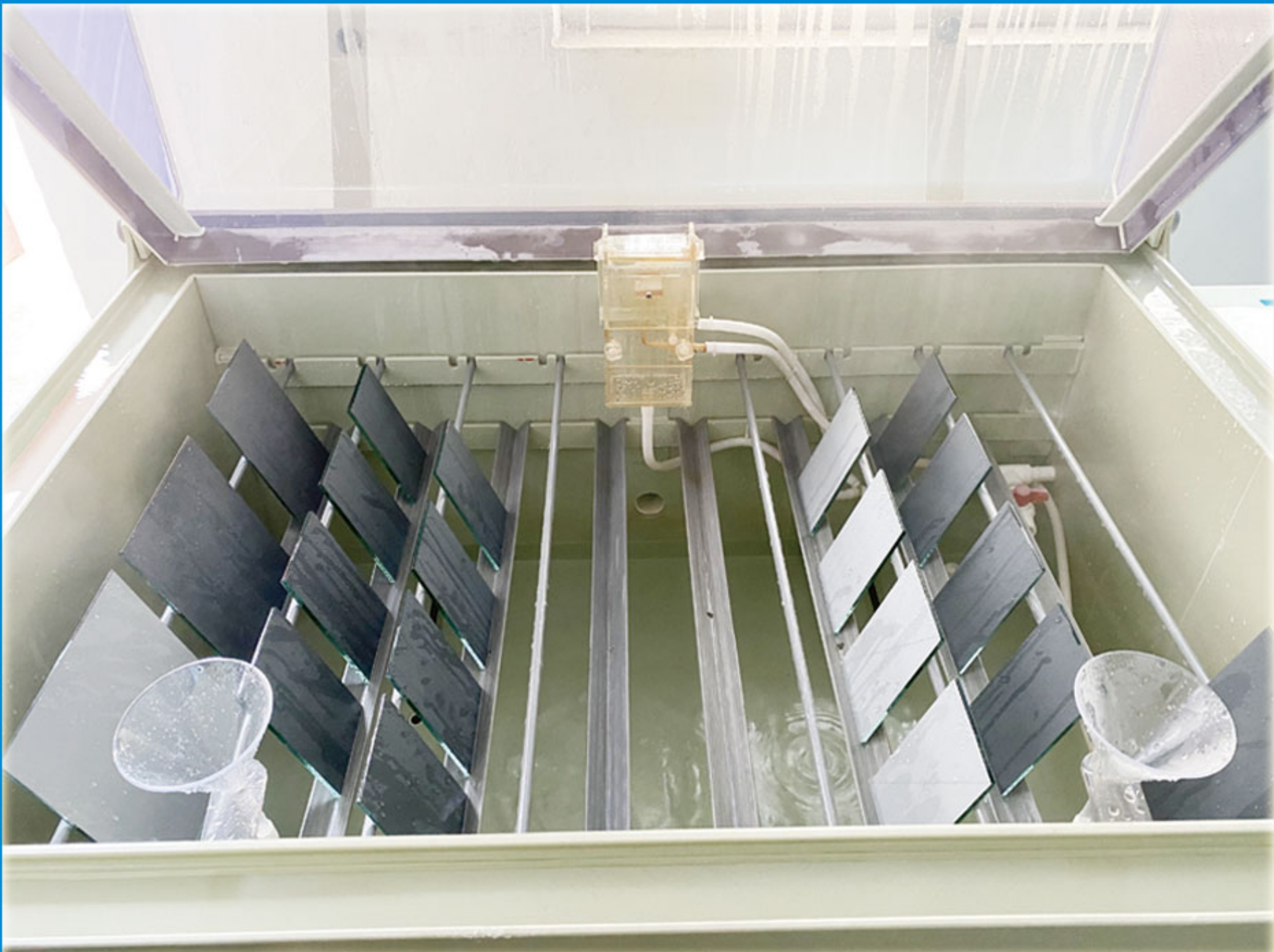
STOCK AREA



TESTING EQUIPMENT



PENDULUM



SALT SPRAY



AGEING



This Certificate of Conformance has been issued to confirm that;

Qingdao Noval Glass Co. Ltd.


Address:
No. 6, Shandong Road, Qingdao City, Shandong Province, China.

is entitled to use the PAS-Mark as shown above, on products manufactured under the Rules & Requirements of the Product Assessment Scheme, a program assessed by Certification Solutions International Pty Ltd to ensure the manufacturing process has the capability to consistently produce products in compliance with:

AS/NZS 2208:1996 Safety glazing materials in buildings
(Including Amendment 1)

Assessment ID No: CSI-ID 7522 Certification date: 28th November 2019
Issue date: 2nd December 2019 Expiry date: 17th December 2020
Certificate No: 7522-2019-12-C1-Rev1

This certificate shall be read in conjunction with the accompanying Product Compliance Schedule. Subject to the client complying with the Product Assessment Scheme, Rules & Requirements, this certificate shall be renewed annually.


Azma Khan
Managing Director
Certification Solutions
International Pty Ltd



The current validity of this document should be checked by contacting admin@csi-certification.com PASF_014 I1R3



2nd December 2019

Mr. Zhu
Qingdao Noval Glass Co., LTD.
No. 6, Shandong Road,
Qingdao City,
Shandong Province,
China.

Dear Mr. Zhu,

Congratulations on re-gaining your Certificate of Compliance and associated Product Compliance Schedule. These documents authorise you to utilise our registered certification trade mark, the PAS-Mark on the certified products listed on the Product Compliance Schedule.



As you are aware having a product orientated management system assists your business to run in an orchestrated manner, ensures the continued compliance of your products and assists you to convey to the marketplace your desired product characteristics which include your products compliance to AS/NZS 2208:1996 Safety glazing materials for use in buildings. CSI look forward to helping you keep this very powerful "product orientated management tool" in good condition.

The required marking permitted by certification must be clearly and indelibly marked only on certified products which comply in all aspects with AS/NZS 2208 and the Product Assessment Scheme, Use of certificate and trade mark logo, PAS-003.

You must promptly inform CSI of any change to the certified products, for example; new types of glazing products that you are not currently certified to AS/NZS 2208. We also need to be informed of any change of the company name, or address of manufacture.

Thank you for choosing CSI as your preferred third party certification body.

We welcome your feedback on the process you have just experienced and look forward to any questions you may have.

Yours Sincerely


Azma Khan
Managing Director
Certification Solutions International Pty Ltd

Certification Solutions International Pty Ltd ABN 49 123 368 650
PO Box 904 Fairfield, NSW 1860 Australia, Ph:+61 2 9728 7608 Fax:+61 2 9728 7786
admin@csi-certification.com www.csi-certification.com

PASA-002



PRODUCT COMPLIANCE SCHEDULE

Qingdao Noval Glass Co. Ltd.

Address:
No. 6, Shandong Road, Qingdao City, Shandong Province, China.

This schedule identifies the Certified Product(s) on which the PAS-Mark and ID. Number may be used.

AS/NZS 2208:1996 Safety glazing materials in buildings
(Including Amendment 1)

Product Description	Laminated safety glazing materials, (PVB interlayer) Toughened laminated safety glazing materials (PVB interlayer) Safety organic backed glass mirror Safety organic backed painted glass
Classification	Grade "A"
Nominal Glass Thickness	6.38mm-16.38mm laminated glass. 8.76mm-24.76mm toughened laminated glass 4mm-6mm Safety organic backed glass mirror (webby and plain Vinyl backing) 4mm-6mm Safety organic backed painted glass (webby and plain Vinyl backing)
Maximum Glass Size	2440mm x 8000mm
Glass Colours	Blue, Bronze, Clear, Green, Grey and White
PVB Nominal Thickness	0.38mm to 1.52mm
Vinyl Materials Thickness	0.21mm

This schedule supersedes any previously issued schedule.

Assessment ID No: CSI-ID 7522 Certification date: 28th November 2019
Issue date: 2nd December 2019 Expiry date: 17th December 2020
Schedule No: ID7522-2019-12-S2-Rev1


Azma Khan
Managing Director
Certification Solutions
International Pty Ltd



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PRODUCT COMPLIANCE SCHEDULE

Qingdao Noval Glass Co. Ltd.

Address:
No. 6, Shandong Road, Qingdao City, Shandong Province, China.

This schedule identifies the Certified Product(s) on which the PAS-Mark and ID. Number may be used.

AS/NZS 2208:1996 Safety glazing materials in buildings
(Including Amendment 1)

Product Description	Plain toughened float glass, Toughened Low-E coated glass, Plain toughened patterned glass
Classification	Grade "A"
Nominal Glass Thickness	4mm to 12mm float glass 4mm to 6mm patterned glass 4mm to 10mm Low-E glass
Maximum Glass Size	Largest furnace dimensions: 2440 mm (W) x 5000 mm (L).
Glass Colours	Acid Etch, Blue, Bronze, Clear, Green, Grey and White

This schedule supersedes any previously issued schedule.

Assessment ID No: CSI-ID 7522 Certification date: 28th November 2019
Issue date: 2nd December 2019 Expiry date: 17th December 2020
Schedule No: ID7522-2019-12-S2-Rev1


Azma Khan
Managing Director
Certification Solutions
International Pty Ltd



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