

RELIANCE FENESTRATION

ARCHITECTURAL GLASS

Architectural Glass

Engineered glass for international projects — specified, sourced,
verified and delivered through a single accountable partner.

INSULATED · TEMPERED · LAMINATED · SILK-SCREEN · HEAT-SOAKED
JUMBO · CURVED · CAST · PATTERN

GLOBAL TRADING PARTNER

POSITION

A single accountable partner
between the manufacturer's
furnace and the project's
façade.

Reliance Fenestration is a global trading partner for high-performance architectural glass and fenestration systems. We work where performance, durability and compliance are not negotiable: curtain walls, structural glazing, overhead assemblies and safety-critical envelopes.

Our role begins before the order and continues past delivery — specification review, factory qualification, certification verification, inspection and international logistics coordination to port or site.

CLARITY

OVER COMPLEXITY

STRUCTURE

OVER VOLUME

CREDIBILITY

OVER PROMOTION

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01

CHAPTER 01

The Company

Judgment, systems thinking and disciplined execution across borders.

FULLY GLAZED ENVELOPE — CURTAIN WALL EXTERIOR

RELIANCE FENESTRATION · ARCHITECTURAL GLASS

04

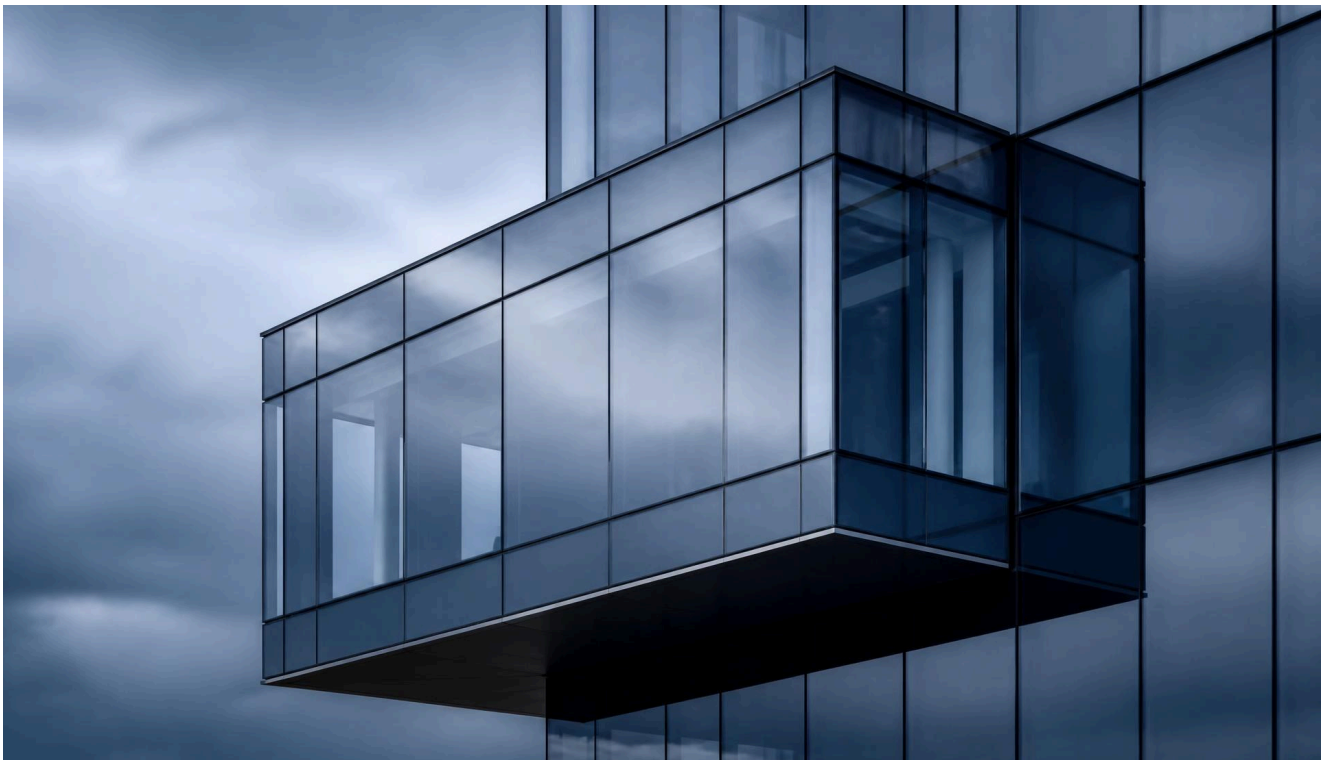
WHO WE ARE

A system architect, not a catalogue.

Reliance Fenestration supports projects where performance, durability and regulatory compliance are critical. Rather than presenting an unlimited catalogue, we maintain one representative system per category, positioned clearly and supported by verified documentation.

Our structured approach covers specification review, factory qualification, production oversight, third-party inspection and door-to-site delivery — bridging world-class manufacturing capacity and the standards international construction demands.

We connect design intent, compliance, sourcing, quality assurance and logistics into one accountable partnership.



EXTERIOR FEATURE GLAZING — PROJECTING GLAZED BAY

DESIGN-LED ENGINEERING

Systems are selected against real project conditions — wind load, thermal demand, acoustic targets and installation sequence.

COMPLIANCE-FIRST THINKING

Certification and test evidence are verified before an order is placed, not after material arrives on site.

SCALABLE GLOBAL REACH

Qualified manufacturing capacity, consolidated shipments and documentation prepared for cross-border execution.

SERVICES

What We Offer

Six capabilities delivered as one accountable process — from first specification to final delivery on site.

01

Product Sourcing

We identify and qualify manufacturers matched to the project's technical requirements, certification needs and programme.

02

Specification & Sampling

Detailed specifications, mock-ups and physical samples approved before production begins.

03

Production Oversight

Inspectors monitor each stage of manufacture, with in-line records and third-party inspection where required.

04

Export & Logistics

Export documentation and coordinated international shipment to port or site.

05

Project Support

A dedicated project manager coordinates between design team, factory, forwarder and installer.

06

Long-Term Partnership

Ongoing support, warranty administration and consistent pricing across repeat projects.

EXECUTION SEQUENCE

Source · Specify · Verify · Coordinate · Deliver

Trading is an engineering discipline before it is a commercial one. Each stage below produces documentation that the next stage depends on, which is how risk is removed from a cross-border supply chain.

01 Supplier Evaluation & Due Diligence

Factory capability, equipment, quality systems and financial standing assessed before qualification.

02 Certification & Compliance Verification

Standards, marks and test evidence checked against the specification and the destination market.

03 Quality Assurance & Inspection

In-line checks and pre-shipment inspection coordinated, with photographic and dimensional records.

04 Shipment Planning & Consolidation

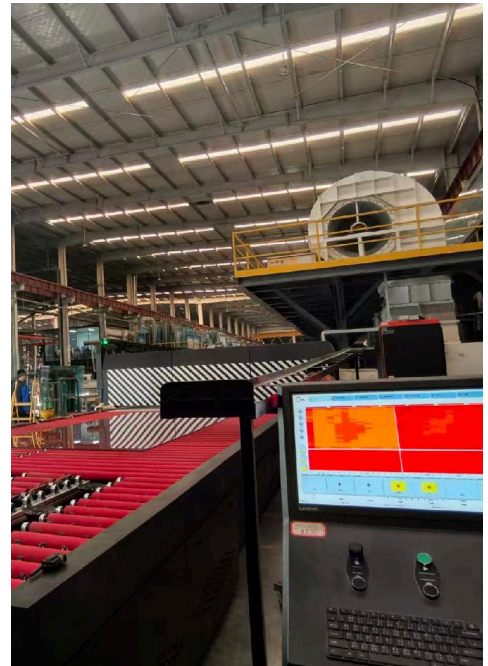
Loads consolidated by project phase to minimise handling and transit risk.

05 Export, Import & Customs Documentation

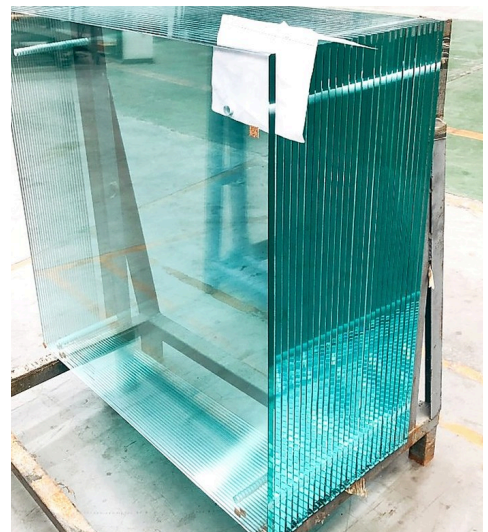
Commercial, origin and compliance documents prepared and reconciled.

06 Global Logistics Coordination

Booking, tracking and delivery to port or site, sequenced to the installation programme.



IN-LINE PRODUCTION MONITORING — WORKS QUALITY CONTROL



INTERLEAVED LITES, EDGE PROTECTION, WORKS INSPECTION

02

CHAPTER 02

Product Portfolio

Nine architectural glass families — specified, sourced and inspected to international standard.

EXTERIOR CURTAIN WALL · HIGH-PERFORMANCE ARCHITECTURAL GLAZING

RELIANCE FENESTRATION · ARCHITECTURAL GLASS

08

FAMILIES

The Portfolio

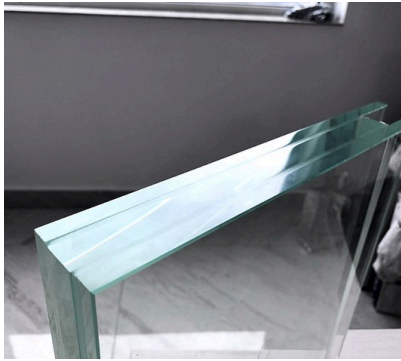
Every family is available tempered, laminated or as an insulated unit where the specification requires it.



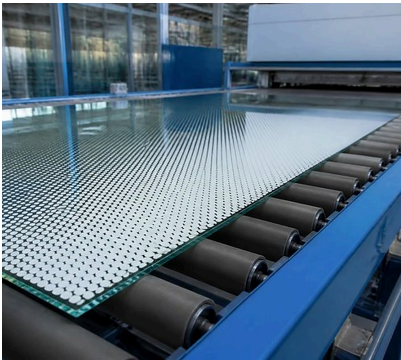
01 Insulated Glass Units



02 Tempered Glass



03 Laminated Glass



04 Silk-Screen Printed



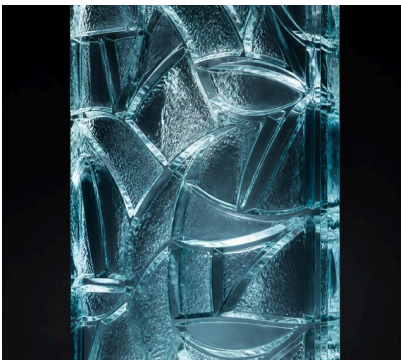
05 Heat-Soaked Glass



06 Jumbo-Size Glass



07 Curved & Specialty



08 Cast Glass



09 Pattern Glass

01 Insulated Glass Units

THERMAL & ACOUSTIC
PERFORMANCE

High-performance insulated units built on fully automated lines with thermoplastic spacer technology. Engineered for thermal insulation, acoustic control and long-term edge-seal durability.



HIGH-PERFORMANCE INSULATED GLAZING IN SERVICE — UNITISED CURTAIN WALL

KEY FEATURES

- Dual-seal edge: butyl primary, polysulfide secondary
- Desiccant-filled spacer at full cavity width
- Low-E coatings for solar and thermal control
- Argon or krypton gas fills
- Triple-glazed and stepped IGU options
- Up to 3300 × 7000 mm panel size
- 1.2 million sqm annual capacity

PERFORMANCE DATA

U-VALUE	1.0 – 1.6 W/m²K (double) 0.5 – 0.8 W/m²K (triple)
SHGC	0.20 – 0.65 (configurable)
R _w ACOUSTIC RATING	32 – 44 dB
CERTIFICATIONS	ISO 9001, CE EN 1279, IGCC/IGMA, AS/NZS 4666

02 Tempered Glass

PROCESS · SAFETY · CONTROL

Thermally tempered to 620–680 °C and rapidly quenched, producing four to five times the strength of annealed glass and a granular, low-risk fracture pattern.



TEMPERING LINE — QUENCH SECTION

KEY FEATURES

- 4–5× stronger than annealed glass
- Safe breakage into small granular pieces
- Thermal stability up to 200 °C
- Compliant with AS/NZS 2208, EN 12150, ASTM C1048
- Available clear, tinted, low-E and coated
- Sizes up to 3300 × 16,000 mm
- 1.5 million sqm annual capacity
- In-line flatness and fragmentation control

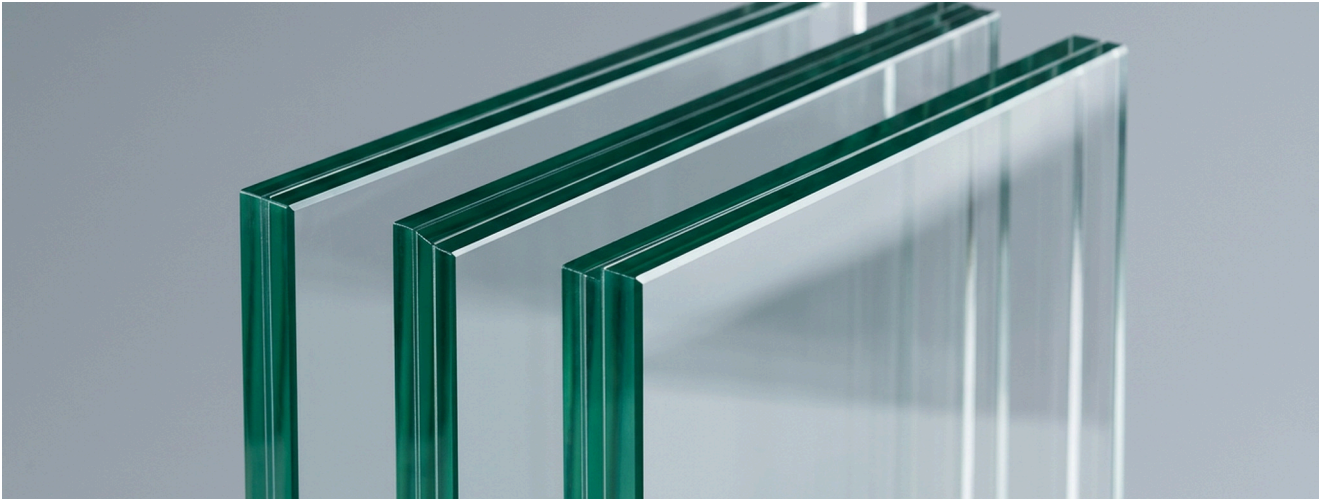
PERFORMANCE DATA

BENDING STRENGTH	120–200 MPa
SURFACE COMPRESSION	>69 MPa (EN 12150)
FLATNESS	within 1.5 per mille (bow / roller wave)
FURNACE TEMPERATURE	620–680 °C
CERTIFICATIONS	ISO 9001, CE EN 12150, SGCC, AS/NZS 2208

03 Laminated Glass

LAYERED · PROTECTIVE ·
STRUCTURAL

Two or more lites bonded with PVB or SGP interlayers under heat and pressure in an autoclave. The assembly holds together when broken, delivering safety, security, acoustic attenuation and more than 99% UV rejection.



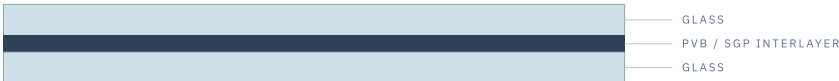
LAMINATED STACK — INTERLEAVED LITES, INTERLAYER LINE VISIBLE

KEY FEATURES

- PVB and SGP interlayer options
- 99% UV radiation protection
- Acoustic insulation up to 40 dB
- Hurricane, blast and bullet-resistant build-ups available
- Custom colour and decorative interlayers
- Sizes up to 3300 × 15,000 mm
- 4 million sqm annual capacity

PERFORMANCE DATA

STC RATING	34–52 (acoustic configurations)
UV BLOCKAGE	>99% (PVB / SGP)
IMPACT RESISTANCE	Class A (AS/NZS 2208)
CERTIFICATIONS	ISO 9001, CE EN 14449, SGCC, Kuraray authorised



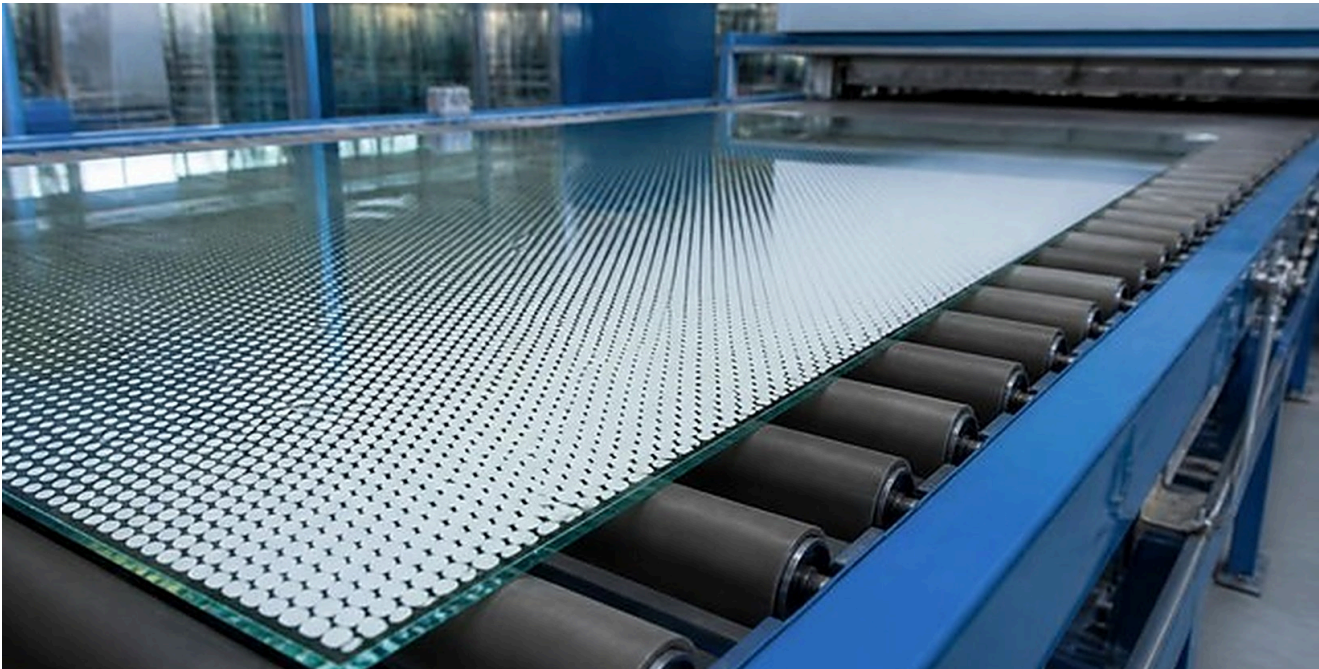
HEAT + PRESSURE — AUTOCLAVE BONDED

FIG. 02 — LAMINATED BUILD-UP

04 Silk-Screen Printed Glass

GRAPHIC · PRECISE ·
PERMANENT

Ceramic ink is screen-printed onto the glass surface and permanently fused during tempering. The frit becomes part of the glass — it cannot peel, fade or be washed off — and is used for solar shading, spandrel treatment, privacy and bird-friendly patterning.



CERAMIC FRIT APPLIED THROUGH A MESH SCREEN AND FUSED DURING TEMPERING

KEY FEATURES

- Permanent ceramic frit fused during tempering
- Custom patterns, logos and full-colour designs
- Excellent colour stability and weather resistance
- Solar shading and heat reduction
- Bird-friendly and anti-slip options
- Scratch, fade and chemical resistant
- Maximum printing size: 3300 × 6000 mm

PERFORMANCE DATA

SOLAR HEAT GAIN REDUCTION	up to 60%
COLOUR FASTNESS	no fading over 25+ years
COMPLIANCE	EN 12150, ASTM C1048
CERTIFICATIONS	ISO 9001, CE, SGCC

05 Heat-Soaked Glass

TESTING · QUALITY · RISK
MITIGATION

Controlled heating to 290 °C accelerates the nickel sulphide (NiS) alpha-to-beta transformation, causing vulnerable panels to fail inside the chamber rather than after installation. The Heat Soak Test (HST) is standard practice for high-rise, overhead and safety-critical glazing.



HEAT-SOAK CHAMBER — FULL BATCH TRACEABILITY

KEY FEATURES

- EN 14179-1 certified Heat Soak Test process
- Nickel sulphide (NiS) inclusion detection and elimination
- 8-hour controlled soak cycle at 290 °C
- Reduces spontaneous breakage risk by 95%+
- Full batch traceability and documentation
- Large-capacity furnaces up to 2500 × 12,000 mm

PERFORMANCE DATA

SOAK TEMPERATURE	290 °C ± 10 °C (EN 14179)
HOLD TIME	minimum 2 hours at temperature
RESIDUAL BREAKAGE RATE	<0.1% post-treatment
CERTIFICATIONS	ISO 9001, CE EN 14179, AS/NZS 2208



FIG. 03 — EN 14179 HEAT SOAK CYCLE

06 Jumbo-Size Glass

SCALE · LOGISTICS ·
ENGINEERING

Extra-large panels up to 16 × 3.3 m in thicknesses from 15 to 200 mm, for curtain walls, lobbies and structural glazing where the joint count must be reduced to a minimum.



OVERSIZED LITE UNDER VACUUM LIFTER — FACTORY HANDLING

KEY FEATURES

- Panels up to 16,000 × 3,300 mm
- Thickness range 15–200 mm
- Available tempered, laminated or as IGUs
- Custom engineering and structural support
- Reduced joint count across large façade spans

PERFORMANCE DATA

WIND LOAD RESISTANCE	engineered per project
FLATNESS	within 1.5 per mille (tempered)
EDGE QUALITY	polished or bevelled to specification
CERTIFICATIONS	ISO 9001, CE EN 12150/14449, AS/NZS 2208

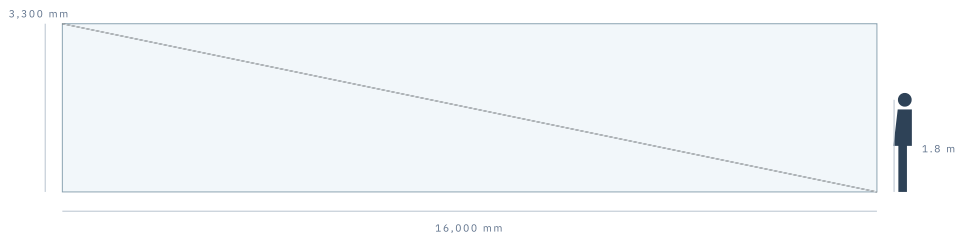


FIG. 04 — MAXIMUM PANEL ENVELOPE, HUMAN SCALE 1.8 M

07 Curved & Specialty Glass

FORM · PRECISION ·
ARCHITECTURAL EXPRESSION

Bent and shaped glass for radiused façades, entrance screens, balustrades and feature elements. Panels are formed to a project-specific radius and template, then processed as tempered, laminated or insulated assemblies to suit the application.

Shaped and irregular geometries are precision-cut and edge-worked by qualified manufacturers.

CAPABILITY

Radius, chord, thickness and build-up are established per project against the façade geometry. Curved glass specifications are confirmed with the qualified manufacturer at enquiry stage and are not published as standard values.

- Cylindrical and shaped bending to project template
- Tempered, laminated and insulated curved build-ups
- Large-format panels handled on dedicated frames
- Precision shape cutting for irregular geometries
- Dimensional verification against project templates



BENT PANELS ON TRANSPORT FRAMES · CIRCULAR BENT LITE, WORKS ENVIRONMENT

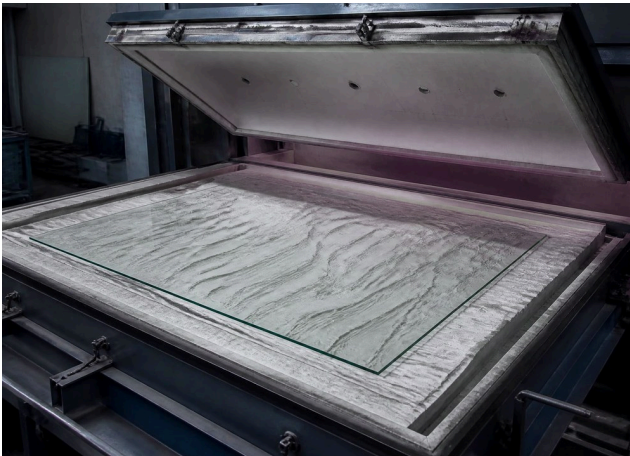


RADIUSED GLAZING IN SERVICE — CURVED CURTAIN WALL ASSEMBLY

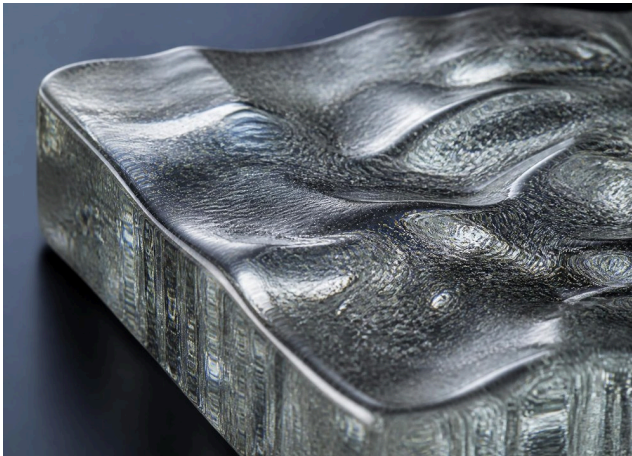
08 Cast Glass

SCULPTURAL · TACTILE ·
BESPOKE

Kiln-formed glass produced by pouring molten glass into custom refractory moulds above 800 °C. The result is a substantial, three-dimensional material with deep relief and strong light diffusion — used for façade features, partitions and feature walls.



KILN FORMING — MOLTEN GLASS INTO REFRACTORY MOULD



CAST SLAB — 40 MM SECTION, THREE-DIMENSIONAL RELIEF

Cast glass is kiln- and mould-formed. It is distinct from rolled pattern glass, which is produced continuously through engraved rollers.

KEY FEATURES

- Kiln-cast at 800–900 °C in custom moulds
- Unique textured and patterned surfaces
- Excellent light diffusion and privacy
- Thickness range 10–50 mm
- Clear, tinted or with embedded elements
- Can be tempered or laminated after casting

PERFORMANCE DATA

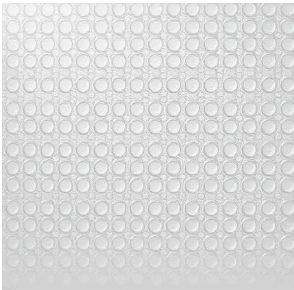
LIGHT TRANSMISSION	60–85% (pattern dependent)
COMPRESSIVE STRENGTH	800–1000 MPa
THERMAL RESISTANCE	standard float equivalent
CERTIFICATIONS	ISO 9001, CE EN 572, AS/NZS 4667

09 Pattern Glass

TEXTURE · RHYTHM · PRIVACY

Rolled textures that diffuse light and provide privacy while retaining natural illumination — formed as molten glass passes between engraved rollers, giving consistent, repeatable surfaces.

MATERIAL LIBRARY — ROLLED SURFACE PATTERNS



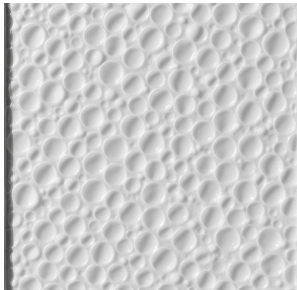
Spotlight

01



Big Rain

02



Watercube

03



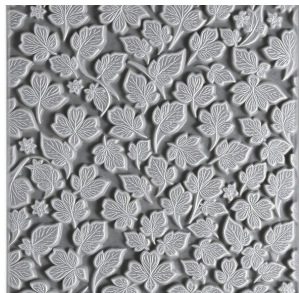
Flutelite S

04



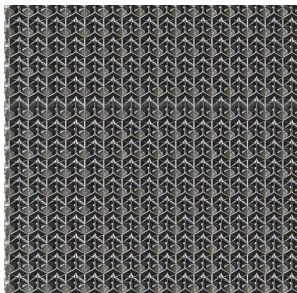
Moru

05



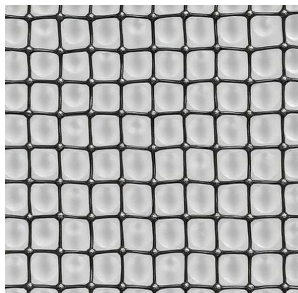
Flora

06



Pyramid

07



Wire Glass

08

SPECIFICATION

- Thickness range 3–8 mm
- Clear and ultra-clear (low-iron) substrates
- Can be tempered, laminated or used in IGUs
- Light transmission 75–90% (pattern dependent)
- Privacy rating moderate to high
- Maximum size 2,440 × 3,660 mm
- Certifications: ISO 9001, CE EN 572, AS/NZS 4667

Technical Data Summary

Optical and thermal performance for standard configurations. Custom specifications available on request.

INSULATED GLASS UNITS (IGU)

CONFIGURATION	U-VALUE	SHGC	VLT	R _w (DB)
6/12A/6 Clear	2.7	0.75	0.80	29
6/12Ar/6 Low-E	1.6	0.42	0.72	30
6/16Ar/6 Low-E	1.3	0.40	0.71	31
6/12Ar/6/12Ar/6 Triple	0.7	0.35	0.62	35
6/16Ar/6/16Ar/6 Triple	0.5	0.25	0.55	38

TEMPERED GLASS

PROPERTY	VALUE	STANDARD
Bending strength	120–200 MPa	EN 12150
Surface compression	>69 MPa	EN 12150
Thermal shock	200 °C	ASTM C1048
Flatness (bow)	≤1.5 per mille	EN 12150
Flatness (roller wave)	≤0.3 mm/300 mm	EN 12150
Fragment count	>40 per 50×50 mm	EN 12150

LAMINATED GLASS

CONFIGURATION	STC	UV BLOCK	IMPACT	LAYER
6.38 mm (3+0.38 PVB+3)	34	>99%	Class A	PVB
10.76 mm (5+0.76 PVB+5)	37	>99%	Class A	PVB
13.52 mm (6+1.52 PVB+6)	39	>99%	Class A	PVB
17.52 mm (8+1.52 SGP+8)	42	>99%	Class A	SGP
21.52 mm (10+1.52 SGP+10)	44	>99%	Class A	SGP

MAXIMUM PRODUCTION SIZES

PRODUCT	MAX SIZE (MM)	THICKNESS	CAPACITY / YR
Tempered	3,300 × 16,000	4–19 mm	1,500,000 sqm
Laminated	3,300 × 15,000	6–200 mm	4,000,000 sqm
Insulated (IGU)	3,300 × 7,000*	12–80 mm	1,200,000 sqm
Cast Glass	Custom	10–50 mm	Per order
Pattern Glass	2,440 × 3,660	3–8 mm	Per order
Heat Soaked	2,500 × 12,000	4–19 mm	Per batch
Silk-Screen	3,300 × 6,000	4–19 mm	Per order

* JUMBO IGU AVAILABLE UP TO 3,300 × 16,000 MM

03

CHAPTER 03

Project References

Selected glazing references across five global regions.

COMPLETED FAÇADE — UNITISED CURTAIN WALL

RELIANCE FENESTRATION · ARCHITECTURAL GLASS

Regional Index

A selection of projects supplied through our manufacturing partners, grouped by region.

06 The Americas

6 PROJECTS · PAGE 22

Museum of Anthropology · Medical Center · Commercial Tower · Resort Villa · Office Complex · Residential Tower

07 Oceania

6 PROJECTS · PAGE 23

Government Building · Residential Tower · University Library · Retail Centre · School Campus · Office Building

08 Asia — Part I

6 PROJECTS · PAGE 24

Convention Center · Corporate Headquarters · Automotive Showroom · Elevated Glass Walkway · Hotel Tower · Office Towers

09 Asia — Part II

6 PROJECTS · PAGE 25

Resort · Exhibition Hall · Waterfront Office · Corporate Office · Marina Bay Towers · Technology Park

10 Europe & Africa

5 PROJECTS · PAGE 26

Airport Terminal · Storm Surge Barrier · Curtain Wall Detail · Terminal Interior · Exhibition Hall

TOTAL SHOWN

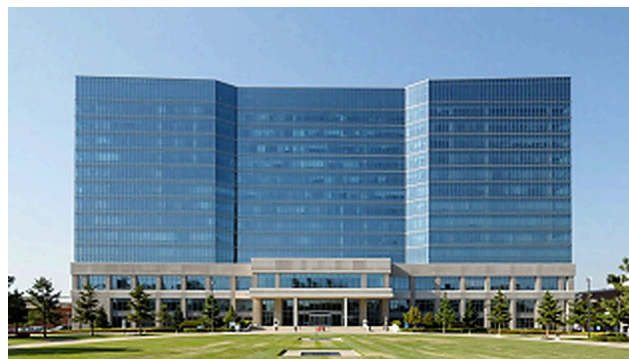
29 projects

06 The Americas



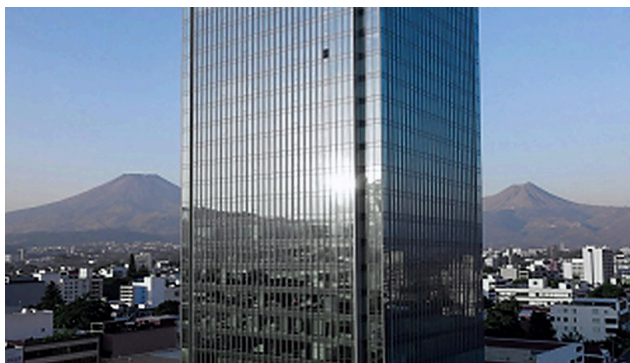
Museum of Anthropology

VANCOUVER, CANADA



Medical Center

HOUSTON, USA



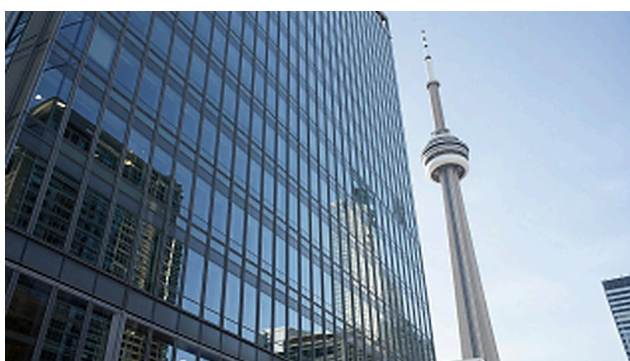
Commercial Tower

GUATEMALA CITY



Resort Villa

COSTA RICA



Office Complex

TORONTO, CANADA



Residential Tower

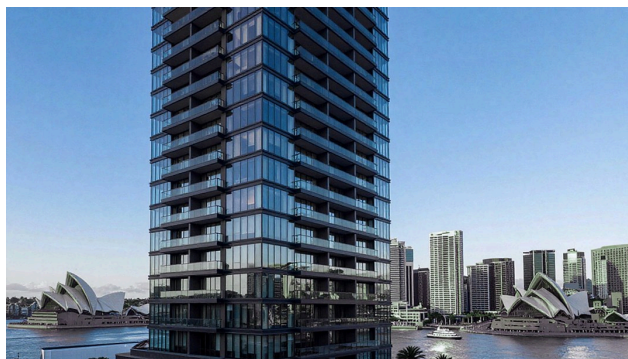
MIAMI, USA

07 Oceania



Government Building

CANBERRA, AUSTRALIA



Residential Tower

SYDNEY, AUSTRALIA



University Library

MELBOURNE, AUSTRALIA



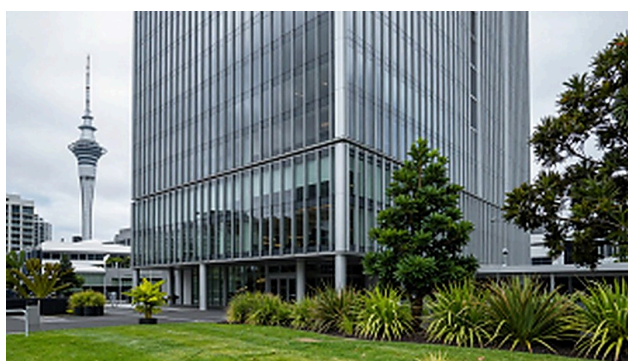
Retail Centre

BRISBANE, AUSTRALIA



School Campus

PERTH, AUSTRALIA



Office Building

AUCKLAND, NEW ZEALAND

08 Asia — Part I



Convention Center

SHANGHAI, CHINA



Corporate Headquarters

SEOUL, SOUTH KOREA



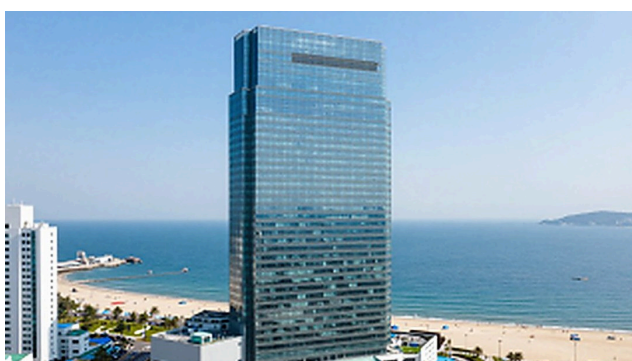
Automotive Showroom

TAIPEI, TAIWAN



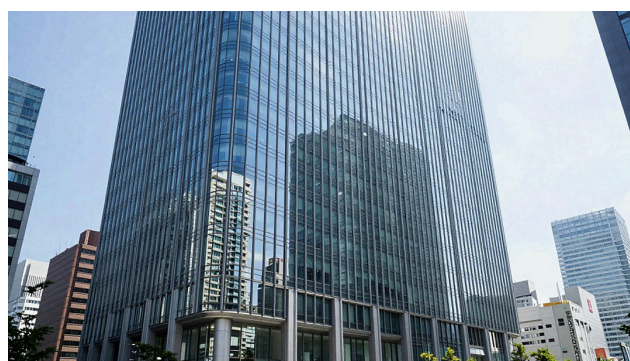
Elevated Glass Walkway

SHENZHEN, CHINA



Hotel Tower

BUSAN, SOUTH KOREA



Office Towers

SHENZHEN, CHINA

09 Asia — Part II



Resort

DA NANG, VIETNAM



Exhibition Hall

BAHRAIN



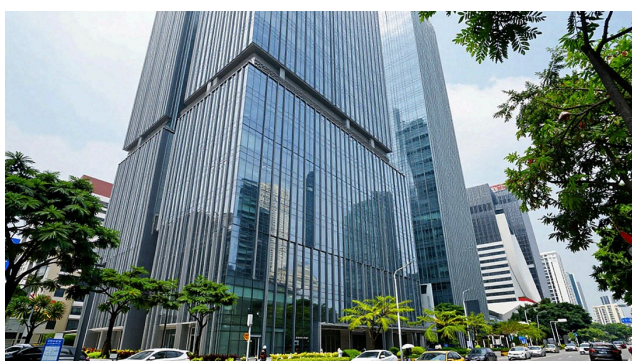
Waterfront Office

SINGAPORE



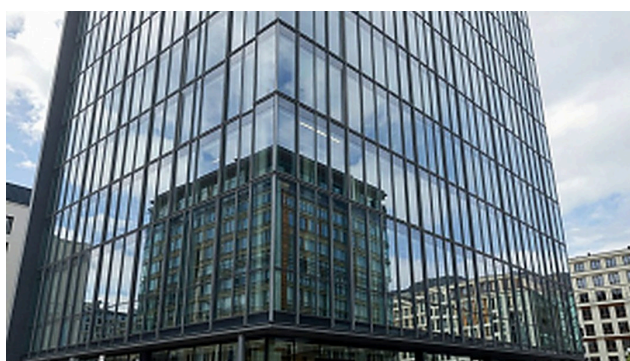
Corporate Office

TOKYO, JAPAN



Marina Bay Towers

SINGAPORE



Technology Park

HO CHI MINH CITY, VIETNAM

10 Europe & Africa



Airport Terminal

LUSAKA, ZAMBIA



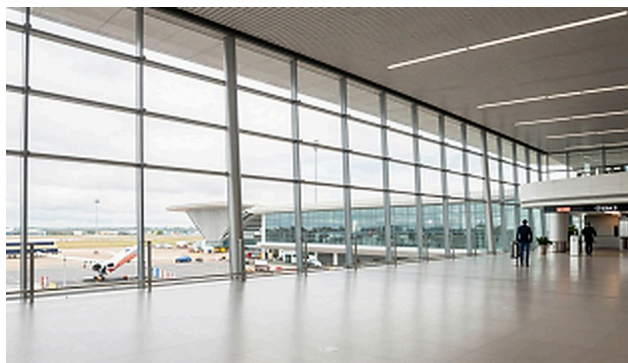
Storm Surge Barrier

NETHERLANDS



Curtain Wall Detail

POLAND



Terminal Interior

LUSAKA, ZAMBIA



Exhibition Hall

POLAND

“Every project has its own glass. Our work is to source it, specify it, verify it and deliver it.”

Lim Jae Keun

FOUNDER & PRESIDENT, RELIANCE FENESTRATION

CHAPTER 04

Sustainability & Certifications

Responsible manufacturing practice, verified through internationally recognised quality and environmental certification across all operations.



AUTOMATED PROCESSING LINE — CERTIFIED PRODUCTION ENVIRONMENT

QUALITY & COMPLIANCE CERTIFICATIONS

- ISO 9001:2015 — Quality Management System
- ISO 14001:2015 — Environmental Management System
- CE Marking — EN 12150, EN 14449, EN 1279
- SGCC — Safety Glazing Certification Council
- AS/NZS 2208 — Australian / NZ Safety Glazing
- IGCC/IGMA — Insulating Glass Certification
- Kuraray (Trosifol) Authorised Laminator
- ISPM-15 — Export Packaging Compliance

ENVIRONMENTAL & SUSTAINABILITY

- Low-E coatings reducing building energy consumption by 30–50%
- Argon / krypton gas fills for superior thermal insulation
- 90%+ glass cullet recycling in production
- Water recycling systems in cutting and grinding lines
- LED lighting and energy-efficient furnace technology
- Compliant with green building standards: LEED, BREEAM, Green Star
- Carbon footprint tracking and annual reduction targets
- Zero waste-to-landfill goal by 2027

CHAPTER 05

Let's build your next project.

Specification review, sampling and budget enquiries are handled directly by our regional contacts.

ASIA & MIDDLE EAST

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