

# FUTURE

Tomorrow starts today

FUTURE | GLASS



## FACADES

# YOUR ARCHITECTURE'S BEST IDENTITY

[www.faglass.com](http://www.faglass.com)

Industry's most extensive facade glass range for the most demanding applications

Solar Innovation Centre  
Dubai

(Project on Cover Page)  
Innovation Hub  
Dubai



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City Walk 2  
Dubai

# Why FUTURE | GLASS

There is no better choice for your buildings!

Future Glass presents the industry's most comprehensive range of architectural glass products designed to cater to the most demanding applications. From structurally-glazed facades to curtain walls and skylights to railings, our facade solutions can efficiently service all your requirements.

Our intricate focus on form and functionality ensures that glass walls look better, perform more effectively and generate better value for our customers.

#### **Only the best raw components used**

Kuraray™, Dow™, Fenzi™, Alupro™

#### **Experience matters**

More than 5 million panels supplied

#### **Unmatched design support**

Structural and acoustic calculations, spectrophotometric compliances

#### **Standards that exceed international norms**

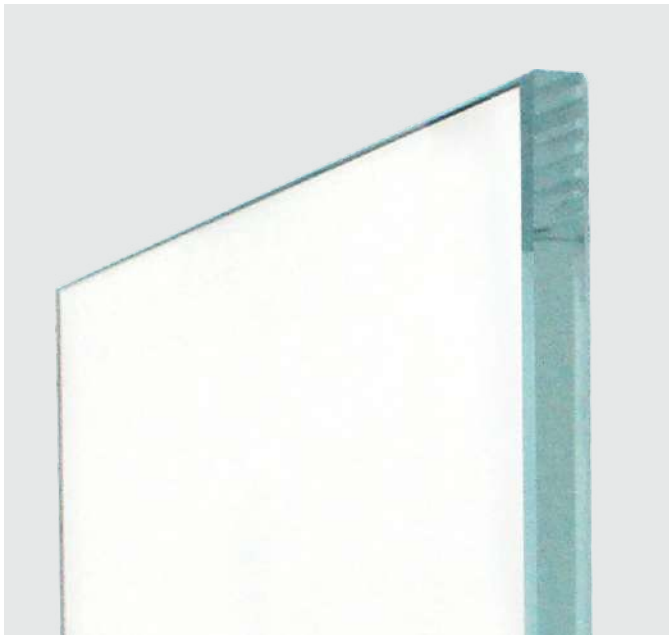
Better than ASTM and EN standards

# Product Offerings



## ecoFACADE Heat Strengthened Glass

These heat strengthened glass panels are designed especially for building façades and curtain walls. They possess excellent optical clarity while maintaining strong mechanical and thermal stress capabilities. If broken, the glass fragments usually stay in the window frame and can be replaced later.



## ecoSHIELD Tempered and Heat Soak Tested Glass

An indispensable building material, toughened or tempered glass is five times stronger than annealed panels.

This safety-glazing material can be heat-soaked to minimize chances of failure due to the presence of nickel-sulphide particles.



## ecoLAM Laminated Glass

These laminated units are constructed with polyvinyl butyral (PVB) or SentryGlas interlayers. These panels offer enormous design flexibility while also offering safety.





## ecoTHERM

### High Performance Insulated Glass

These high performance insulated glass units have two or more glass lites assembled together. This product offers enhanced solar-control performance and spectral selectivity as compared to monolithic glass.

You can choose from basic tints and solar coatings to high-performance silver low-E coats based on your requirements. Each panel can be filled with inert gases such as argon for lower heat-flow rates. ecoTherm panels can serve as great sound insulators and are highly effective at preventing condensation.



## FRITVIEW

### Ceramic Fritted Glass

Offering privacy and imparting a sense of style, these decorative and functional panels are created by fusing ceramic inks on glass. The 100% UV-resistant inks, sourced from Europe, are guaranteed against flaking and peeling.

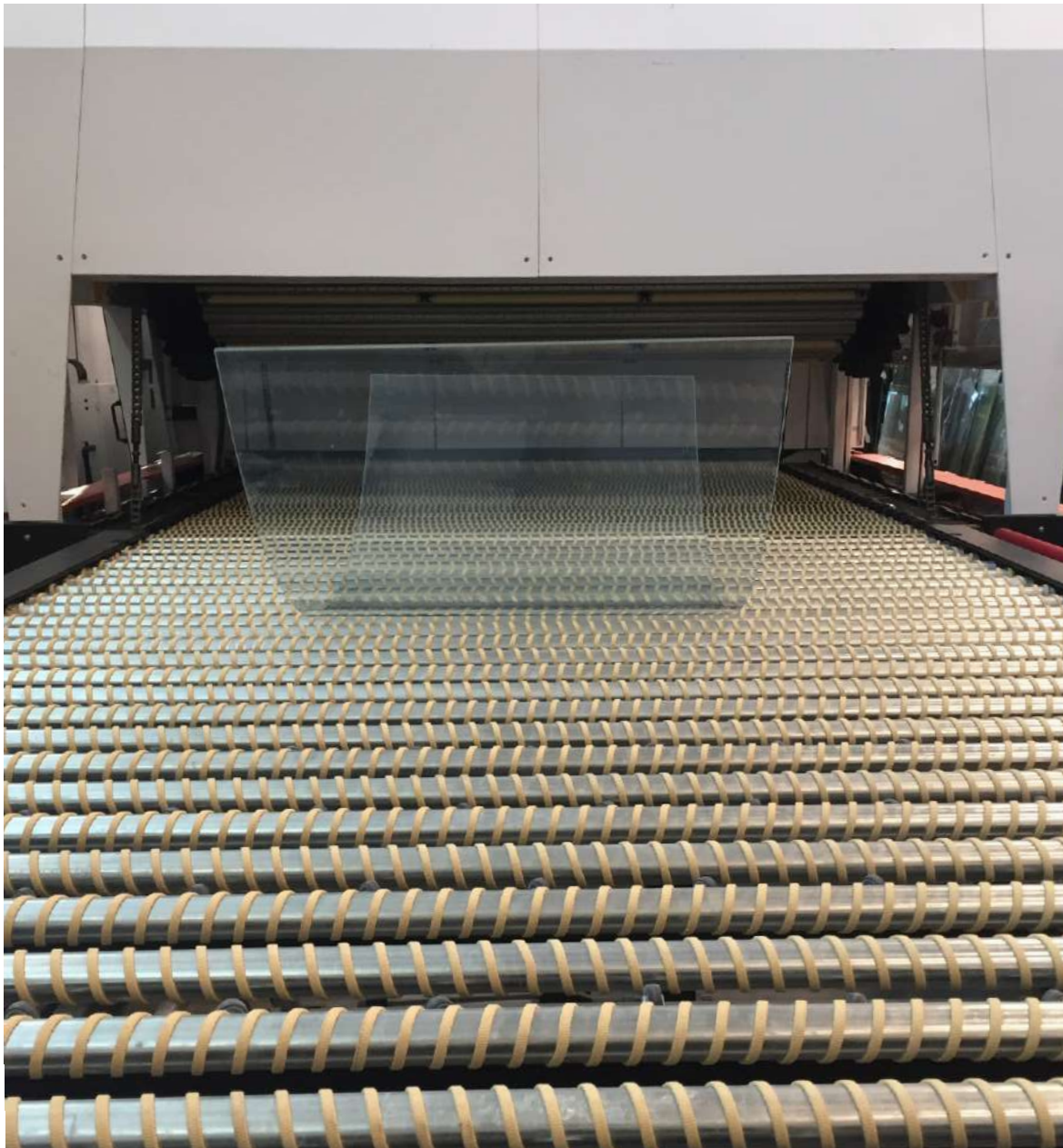
You can have a custom design developed and applied on clear, tinted or coated glass based on your requirements.



# CURVEVIEW

## Curved Heat-Treated Glass

Aesthetically superior to straight glasses, these curved panels are available in fully tempered, heat-strengthened, and heat-soaked variants. Offering phenomenal flexibility in design and form to architects, these panels can be combined into an insulated / laminated unit for enhanced safety and comfort.







Motilal Oswal  
Headquarters,  
Mumbai

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# SHEIKH ABDULLAH-AL-SALEM CULTURAL CENTRE AND MUSEUM

Kuwait City, Kuwait

## How complex scales, shapes and shades showcase the region's rich cultural diversity

Complex non-rectangular shapes were fabricated with utmost precision to match the structural framework.

Project constituted of about 7800 unique panels that had to be produced and packed in batches as per project installation sequence and to match the exact project time line.

To add to the complexity, the elevation was categorized in multiple print designs (70%, 85% & 100%) that were perfectly screen printed to match overall design aesthetics.

A custom-designed production tracking software ensured all three panes of glass in the makeup flowed through various processing stages and reached in sync for final unification to make the glass panels.



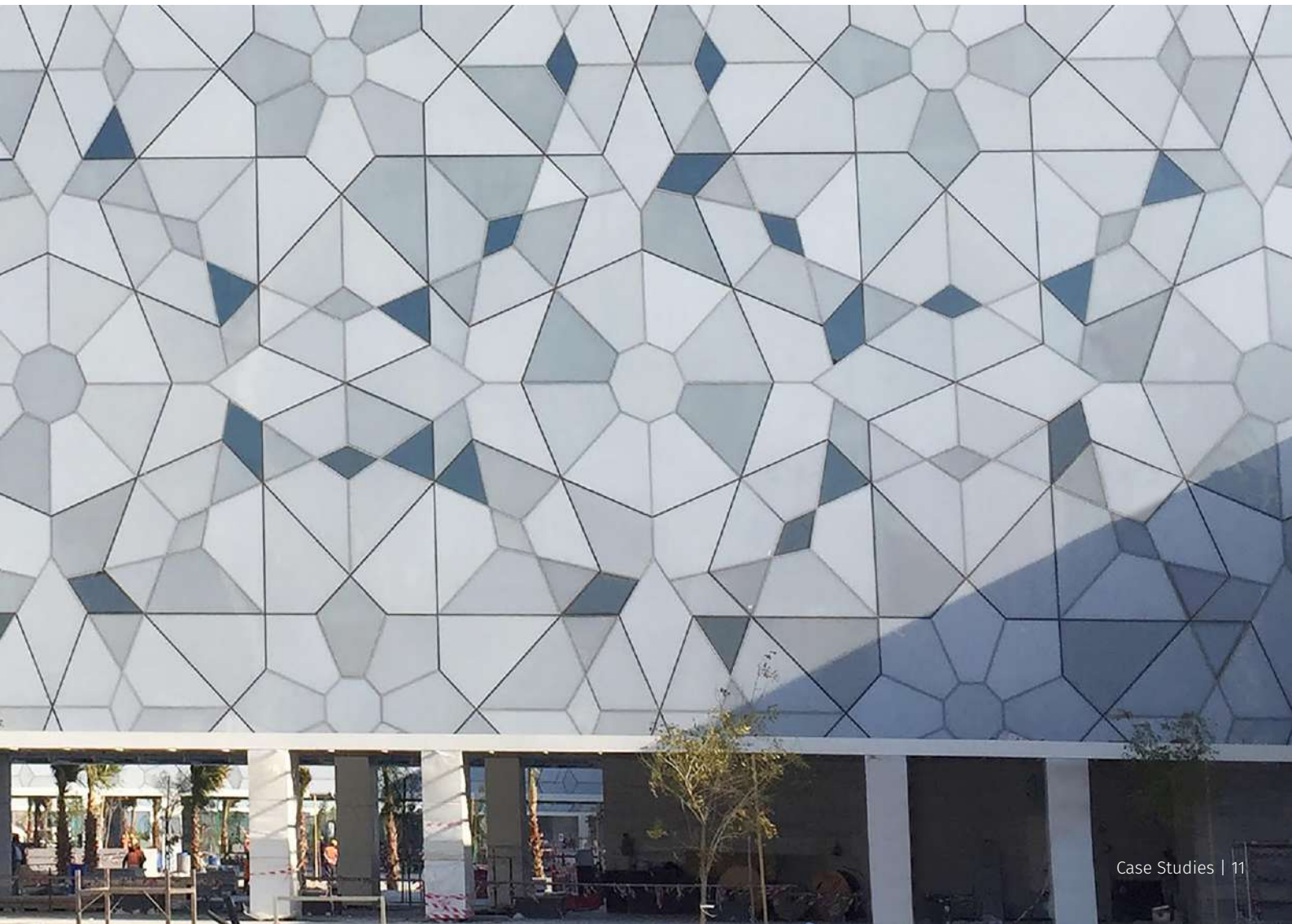
**Client:** Amiri Diwan

**Architect:** PACE

**Product:** 8mm Ultra Clear with Design Ceramic + 16 Air + 6mm Guardian DS 50

**Quantity:** 19,500 square meters

**Application:** Structural glazing and curtain walls



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# HARBOUR CENTRAL

London, United Kingdom

## Where Luxury Meets Quality



**Client:** Galliard Homes  
**Architect:** Rolfe Judd  
**Façade Consultant:** Meinhardt Facades  
**Product:** 13.52 Clear LowE HS with Black Border frit + 24mm Black Spacer (Argon) with Expanded Metal Mesh + 6mm Clear HS  
**Quantity:** 4100 sqm

- The panels for the Harbour Central project had to be created keeping the most exacting international standards in mind. This made creating large panels that included a metal mesh with minimal sagging and distortion extremely difficult.
- Our search for the perfect gold and silver mesh took us as far as Germany and Italy, but despite sourcing products from various countries, we were able to achieve the project's strict timelines.
- To ensure zero breakage during delivery, our logistics and delivery team took every precaution that was necessary while upholding the strictest European quality standards.



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## OBEROI COMMERZ II Mumbai, India

### Setting New Quality Benchmarks

**Location:** Mumbai, India  
**Client:** Oberoi Realty  
**Façade Consultant:** Meinhardt  
**Contractor:** Permasteelisa  
**Product:** 26mm IGU with 8mm  
Solarban R100  
**Quantity:** 35000 sqm



- The PERMASTEELISA Group one of the biggest facade contractors in the world and known for its stringent quality standards. We were awarded this project from the group company based out of Thailand. The coated glass was sourced from PPG (USA) and the finished IGUs were supplied to the factory in Thailand. Despite the complicated logistical processes, we were able to execute the project flawlessly, with minimal on-site rejections and breakage.
- During the production process, we upheld the most stringent quality guidelines as outlined by Permasteelisa. A sampling plan was also implemented to ensure compliance to standards.
- The impossible task of achieving optical distortion levels that surpassed international quality norms was accepted. The client was more than satisfied with how we executed the project, which enabled us to set a new benchmark for quality in the company.



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# DUBAI FRAME

Dubai, United Arab Emirates

## The Biggest Frame on the Planet!



- Working with the Dubai Government was an enriching experience, but it forced us to exercise caution at every step of the process to ensure that our customer was satisfied with the result.
- As the project was announced on national news, the handover date was fixed and we had to work with strict timelines while still completing stringent quality checks on each panel before delivery.
- Although we initially estimated the project to take 4 months, we were able to complete delivery within just two and a half months, which was a difficult but rewarding task.

**Location:** Dubai, UAE  
**Client:** Government of Dubai  
**Quantity:** 4000 sqm  
**Product:** 44mm IGU with 12mm Neutral Plus 50



## 5

CASPIAN  
WATERFRONT MALL

Baku, Azerbaijan

Iconic Development  
Embracing the Emblem  
of Azerbaijan**What We Achieved**

- We were trusted with the most complex part of the structure - the flower bud. Each panel that we used was unique with different trapezoidal shapes, sharp edges and precise angles.
- The most challenging task we faced was to manage three panes of glass on the factory floor before bringing them together to form an IGU. Given the unique structure of each pane, this task became all the more difficult.
- To execute the project flawlessly, we used a custom configured production tracking and planning software. This enabled us to track each panel and complete the project on time with minimal internal remarks while maintaining all project specifications.

**Client:** Pasha Construction**Architect:** Chapman Taylor**Contractor:** Permasteelisa Gartner**Product:** 12mm FT HST Sunguard Neutral 50 + 16mm Black Warm Edge spacer + 88.4 Clear HS**Quantity:** 3000 sqm

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## BURJ VISTA

Dubai, UAE

**Client:** EMAAR

**Architect:** Adrian Smith

**Façade Consultant:** Koltay Façades

**Product:** 10mm FT HST Sunguard Neutral  
50 + 20mm Black Warm Edge spacer +  
17.52 Clear HS

**Glass Size:** 2500mm x 5500mm

### What We Achieved

- We were privileged to be a part of the exclusive Burj Vista project, which created luxury homes with stunning views of the Burj Khalifa, Dubai Fountain and Dubai Opera District.
- To ensure that residents could enjoy unparalleled views from the podium areas, we used large panels that measured up to 2,500 mm x 5,500 mm. Each of these panels weighed nearly 1 ton.
- With the help of our strong machinery and sturdy handling equipment, we were able to successfully manufacture the panels with very low distortion levels, which was exactly what the customer wanted.

## Majestic and Uninterrupted Views Made Possible Through Large Glass Panels





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## BOULEVARD MALL

Muscat, Oman

### Blending Omani Treasures with Emerging Design Concepts

**Client:** Al Arami

**Contractor:** Unique contracting

**Consultant:** AEB-Assaf

**Façade Consultant:** Meinhardt Facades

**Product:** 8mm Suncool 40/22 FT HST + 20mm Spacer + 13.52 Clear HS

**Quantity:** 8000 sqm



#### What We Achieved

- Working on the Boulevard Mall's glass atrium and skylight, which spans 5,190 sq. metres, was a challenging yet inspiring task. The skylight was unique as it featured the union of several triangle panels that formed a network.
- Despite the fact that each glass was different, we were able to track every panel with ease thanks to our real-time factory production control software and barcode tracking. This gave our team the edge we needed to complete the project on time with minimal internal rejections.
- During delivery, we packed the panels based on the installation sequence. This ensured easy on-site handling and minimised breakages.



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## FARWANIYA COURT COMPLEX

Kuwait City, Kuwait



## Reflecting the Strength and Transparency of the Kuwait Justice System

**Client:** Amiri Diwan

**Architect:** PACE

**Product:** 6mm SolarE Grey Tempered + 16mm Black Spacer + 13.52 Clear HS Laminated

**Quantity:** 12000 sqm

### What We Achieved

- Given our advanced infrastructure, superior project management skills and quick response times, we were entrusted with the task of completing both court complexes in just 20 months.
- Since time was of the absolute essence, we procured our material in bulk to ensure that we had adequate raw material. We also created a special team to overlook the coordination of the entire project.
- Even though production was rushed, we were able to maintain the highest quality standards, achieving optical distortion that surpassed European norms.

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## ABU DHABI INTERNATIONAL AIRPORT, MIDFIELD TERMINAL COMPLEX

Abu Dhabi, UAE

**Client:** Abu Dhabi Investment Authority (ADIA)

**Architect:** KPF

**Façade Consultant:** Arup

**Project Management:** AECOM

**Contractor:** Chadwick

**Product:** 66.4 HS SN 29/18 + 16mm Black spacer + 44.4 Clear HS with 2mm white dot ceramic frit pattern

**Quantity:** 4000 sqm

## A Gateway to Abu Dhabi





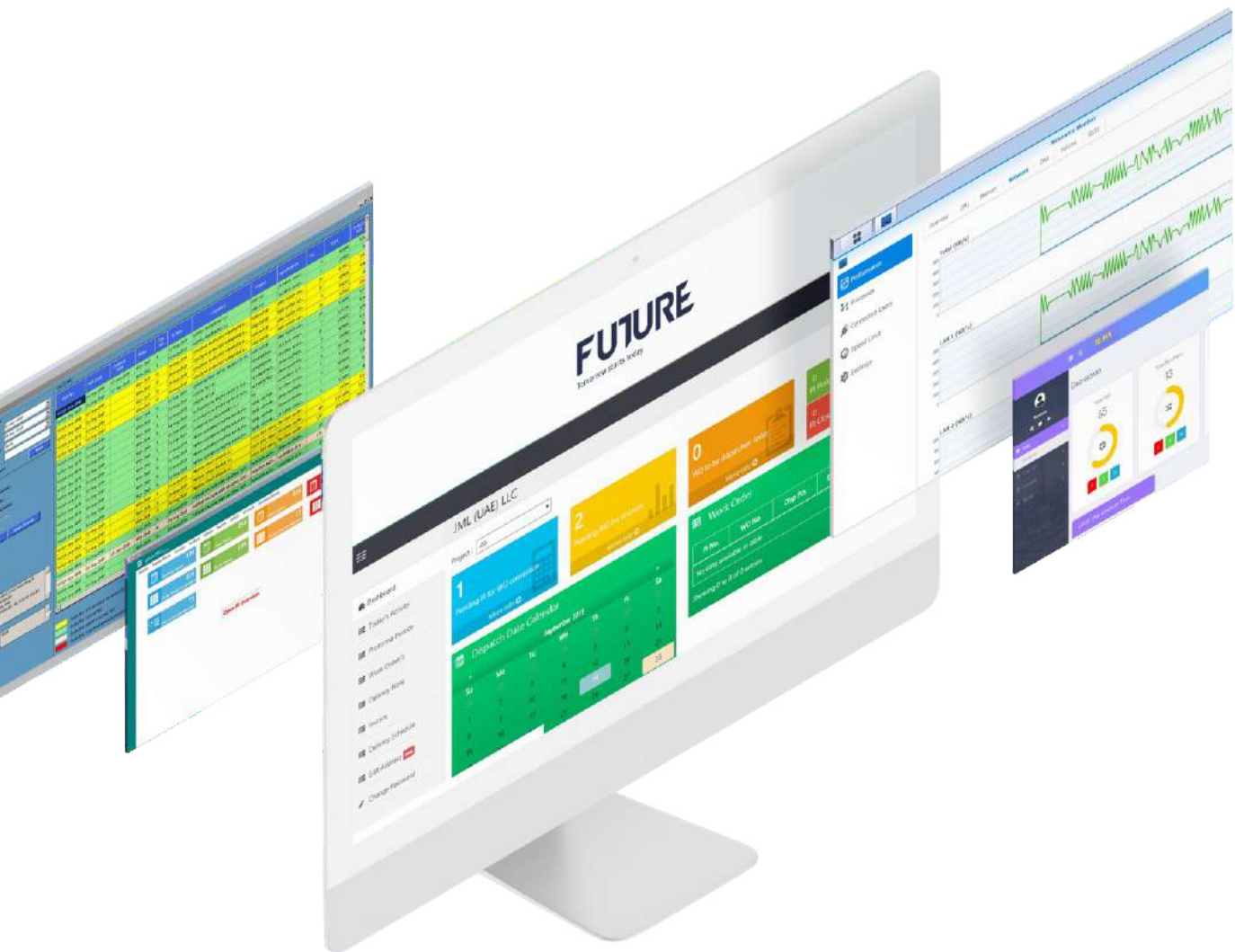
### What We Achieved

- Working on one of the most important buildings in Abu Dhabi was truly a great honour for us. The terminal, which can host up to 80 million passengers every year, is known for its column-free interiors and high-performance insulated glass roof which has been installed at a height of almost 50 metres.
- We worked very closely with Guardian to achieve the stringent performance requirements of the project. The skylight required a shading coefficient of 0.09 to be able to deal with the harsh weather and extremely hot temperatures while still allowing enough light to pass through the panel. We analysed several iterations of glass coating types and product combinations before we were able to create panels that met the customer's HVAC specifications.
- It was our duty to supply the skylight glass for the terminal. We manufactured the panels with high precision while meeting the highest quality expectations. The finished units were inspected by our in-house quality team along with experts from the client's team. The panels met the Hadamar Standards, which surpass even international quality norms.

# Technology Advantage

Information technology today is at the core of all business processes and functions and it is hard to live even a single day without using software in one form or the other. We at Future Glass recognize the importance and power of technology and have embedded it in every aspect of our administrative and production functions.

Our GlassPro system is a great tool which enables us to provide you live information on all your order related queries - be it quotations, production tracking or invoicing - all in real time. One of the first companies in the region to have a fully integrated software governing all our processes, it enables you to get quick and convenient access to all your queries. Every piece of glass is tracked online through its different production phases thereby giving us complete control over your order.



# Glass Selection Process

At Future Glass, we believe in supplying not just glass products but the right glass product for every architectural requirement. Our solutions driven approach will help you identify the best-fit glass specification for a functionally efficient facade that provides better energy conservation. In addition, our capabilities to process a huge range of glass tints and coatings gives you the opportunity to select facades that best match your aesthetic requirements.

Our approach towards glass selection revolves around four key criteria, satisfying aesthetic tastes, conforming to safety norms, meeting energy-efficiency levels and reducing sound levels.



## Aesthetics

- Exterior and interior colour
- Reflective levels
- Internal colour rendering
- Vision and spandrel area contrast



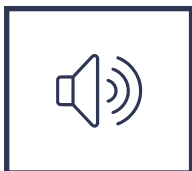
## Safety

- Level of protection against mechanical and thermal shocks
- Conformance to building codes
- Special safety applications (eg. Fire resistance, Bullet Resistance, Burglar Resistance)



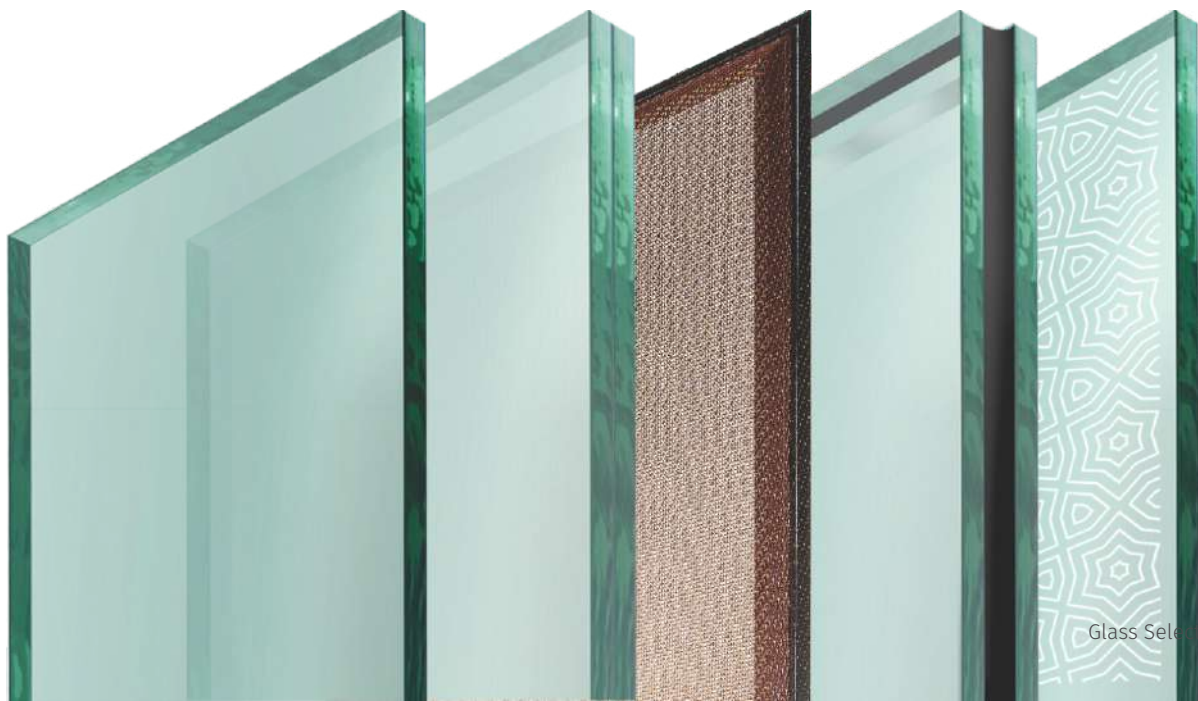
## Energy

- Total solar heat gain and rate of heat transfer through the facade
- Effect of facade on HVAC system
- Return on investment analysis with use of high performance glass



## Acoustics

- Consideration of outside noise and building type to determine total sound reduction through the facade
- Suggestions on different glass types and thicknesses to minimize sound transmission



# Should you choose to partner with us, here's what you can expect

1



## Conceptualization

Specification team understands the requirements and suggests suitable products

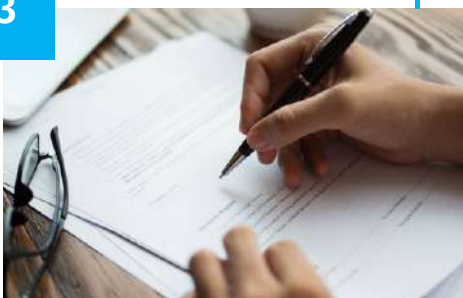
2



## Glass Selection

The glass selection process is done on the basis of four vital properties: Aesthetics, Safety, Energy and Acoustics. For detailed information please refer page 16.

3



## Tender Enquiry

A dedicated estimation team is allocated solely for tender process requirements. Post this a specialised team takes over technical datasheet filling and other datasheet related processes.

9

## Logistics

- State-of-the-art packaging
- Exports to more than 50 countries with international packing standards
- IPPC certified wood
- Individual banding of glass



# 10 STEPS FOR EXCELLENT END-TO-END SERVICEABILITY

4



8

## Production Starts

- Tracking software with barcoding
- Backward traceability
- Automated infrastructure
- Highly skilled team of 250 employees
- 43 years experience in glass industry



7

## Procurement

- Covering total project requirement (with a storage capacity of 120 containers) ensures raw material availability throughout the duration of project and avoids any delays due to material shortages
- 3% minimum attic stock



## Order Management

- Every project starts with a kick-off meeting that covers all points related to project timelines, quality expectations and serviceability needs
- Order Acknowledgment document covers all points covered in kick off meetings

6



## Glass Analysis

- Thermal stress analysis
- Wind load analysis
- Sealant analysis and compatibility
- Thermal and optical properties

5



## Quotation Submission

Our guaranteed 3-Day Quotation approach comes with the ability to quote with multiple coated glass options and with complete Technical Data Sheets.



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## Customer Service

- Access to TrackPro - our online order management software
- See real time progress
- Dedicated team for client servicing
- Project management personnel
- Customized project tracking sheet to suit customer needs



Caspian Water Front



Al Farwaniya

# Our Project Footprint Across the Globe



Crown Plaza Hotel



University of Dubai



Mall of Oman



At the Top, Burj Khalifa





Sobha Hartland



Al Wasl Plaza



Dragon City Hotel-Dubai



Msheireb Downtown



Merqab Mall



Sobha Hartland Villas



Al Wasl Jumeirah Plot



Sino Lanka

# Who We Are

Future Architectural Glass, LLC (Future Glass) is a joint venture between a multinational and diversified Singapore corporation and a leading Indian glass conglomerate. The company has established itself as UAE's premium glass processor having the entire gamut of European machinery and systems to process any type of interior and exterior glass.

Since 1976, the group has been serving the needs of architectural glass market by providing latest products suiting the dynamic needs of architects/consultants. We started operations as a glass trading and distribution firm and ever since have expanded our products and services to include safety glass manufacturing and providing specialty glass solutions.

In the last four decades, we have diversified into several product lines encompassing exciting exteriors glazing products, comfortable interior

glazing, specialty design applications and high performance green building product solutions.

Our specialized products development unit, is dedicated to understand the changing needs of the architectural glass market and introduce innovative glass and glazing solutions for enhanced comfort, safety and performance. Spread over more than 30 countries worldwide, our strong client base is an indicator of our global reach and the trust we share with our customers.

Our ever-expanding presence with offices in UAE, India and Singapore helps us serve the varied needs of client promptly and efficiently. With multiple manufacturing bases in UAE and India, we are able to optimize resources and utilize the location advantage to the benefits of our global clientele.



# Key Indicators



5

Million panels delivered worldwide

2

Manufacturing base – UAE and India

3

Regional headquarters – UAE, India, Singapore

4+

Decades Group's experience in Glass

35+

Countries exports worldwide

1000

Employees group strength

500,000

Sq.ft. area of Factory space

**FUTURE**

Tomorrow starts today



# FUTURE

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