



Corporate Brochure

Africa & Middle East



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When you believe barriers can be broken, anything is possible

We live in a time of unimaginable potential. The challenge is living up to the unending needs of the fast-paced world in which we live. At Guardian Glass, our goal is to push the boundaries of glass like never before, with new technology, collaboration and discovery. We are boldly challenging the status quo, creating beautiful environments and providing safe, durable, inspiring solutions in today's global glass industry. We call this effort See What's Possible™, and we invite our employees and customers to be part of it.

Our footprint helps you make your mark

As one of the world's largest producers of magnetron sputter coated glass and one of the largest float-glass producers, Guardian produces and supplies state-of-the-art products all over the world. We work with clients on global, regional and local levels - exploring new design trends, building structures that enhance people's lives and doing so responsibly, by providing better products that are consuming fewer resources.



160

countries served
with projects on 5 continents

500

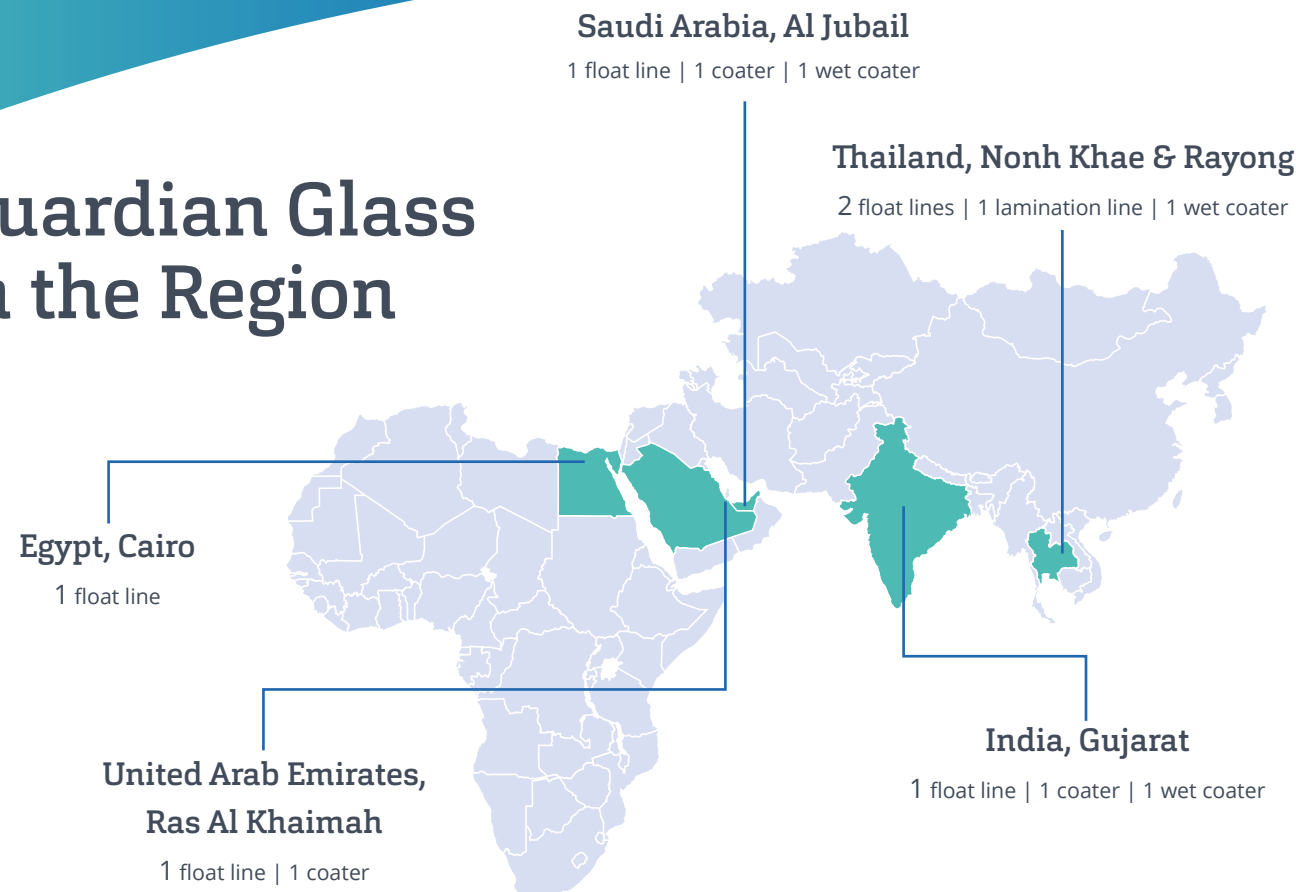
km of float glass
produced every day

22

float glass lines
worldwide

Find out more on guardianglass.com

Guardian Glass in the Region



Guardian Glass produces float, high-performance glass and fabricated glass products for use in exterior (both commercial and residential) and interior architectural applications, as well as transportation and technical products. You'll find Guardian glass in homes, offices, cars and some of the world's most iconic architectural landmarks. We continuously work to create new glass products and solutions using the most advanced technology to help customers See what's possible™

Guardian Glass is the largest business of Guardian Industries. Guardian Industries and its family of companies employ 11,800 people around the world

devoted to bringing new ideas to life. We constantly strive to innovate in everything we do, to create more value for our customers and communities. One team with one ultimate goal: One World. Made Better.™

As an industry, the future is ours to build. Our glass enables new structures that push toward the sky and inspire those who see their designs. It lets in more light - enriching spaces and the lives of the people who occupy them. At the same time, our glass can help reduce the heating and cooling required to keep buildings comfortable. Simply put, Guardian Glass makes life around the world better.

1

Guardian Glass Development & Technology team

300+

expert design managers & specialists

8

Principle Based Management™

11,800+

employees

800

patents awarded

116,000

glass panels on the Burj Khalifa

Find out more on guardianglass.com

Guardian Glass Development & Technology team

Our latest advances come from a long tradition

At the heart of our research and development Guardian Technology and Development Team work together to push the boundaries of light. Developing new glass coatings, processes, formulas and technologies, the team is committed to creating products that achieve our customer's goals and improve quality of life. The team utilizes a full-size vacuum coater to accelerate product design and development.

Giant progress is measured in nanometers

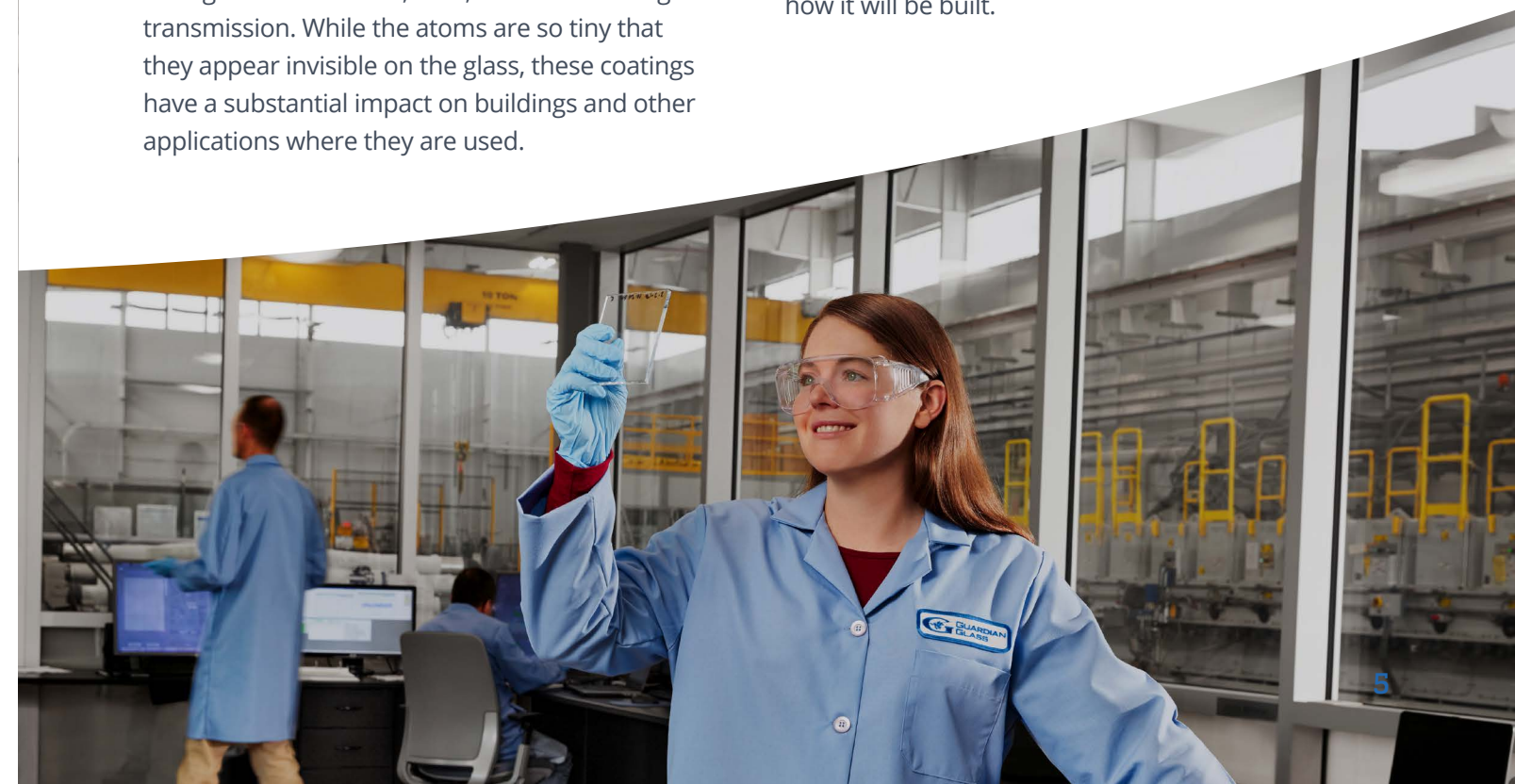
Since 1983, Guardian has developed and applied glass coatings using the magnetron sputter coating process. Our researchers determine which combination of individual atoms will optimize the performance and aesthetics of the glass - impacting the right blend of color, heat, insulation and light transmission. While the atoms are so tiny that they appear invisible on the glass, these coatings have a substantial impact on buildings and other applications where they are used.

Our breakthroughs get put to use

Success in the laboratory doesn't mean much unless the breakthrough can be properly deployed in the field. Our team of engineers turns great formulas into superior products that can be manufactured around the world. With an undying focus on doing more with fewer resources, we are constantly looking to increase the efficiencies of our processes - benefiting ourselves, our customers and society at large.

The possibilities are endless

Glass is so critical to our daily life that we are constantly thinking about additional and better ways to use it. Drawing inspiration from other industries and using design thinking, we are envisioning how glass can make the way we work, play, learn and live better. While we do not know the future, we can bet that glass will play an ever more significant role in how it will be built.



Product Range

SunGuard™ eXtra Selective (SNX)

By delivering world-class selectivity, eXtra Selective (SNX) helps reduce costs by lowering the demand for artificial lighting, air conditioning and heating. With a transparent appearance, low reflection and consistent colour, it delivers optimum thermal insulation when used in a standard double-glazed unit.

SunGuard™ SuperNeutral

SunGuard™ SuperNeutral product range offers the highest selectivity available within the region. It comes in a neutral colour with a wide range of light transmission to fit any architectural design, no matter how iconic.

SunGuard™ SuperNeutral Grey

Guardian SunGuard™ SuperNeutral (SN) Grey products are highly selective double silver coated solar control glass with a distinctive neutral grey appearance.

SunGuard™ Double Silver

Guardian™ SunGuard™ Double Silver range provides a wide range of colours with high selective performance. For commercial projects that want to stand out from the rest.

SunGuard™ High Performance

Guardian™ High Performance™ range of products provide industry leading solar protection as well as thermal protection for all season protection. It is available in a range of distinctive colour and light transmission choices to suit any project.

SunGuard™ Solar

Guardian™ SunGuard™ Solar™ range is the versatile product range for any project. With a flexible colour and light transmission range, the Solar products provide industry leading solar protection and aesthetic quality.

SunGuard™ High Durable Plus

Guardian™ SunGuard™ HD Plus™ is the modern standard for residential products. With a wide range of vibrant colours and excellent solar protection it meets the required standards for residential building codes in Saudi Arabia.

SunGuard™ High Durable Colours

Guardian™ introduces the High Durable Colors series with enhanced coating resistance, coupled with vivid and clear colour reproduction. SunGuard™ HD Colors™ not only looks fantastic from the outside, but also enables you to see clearly and without any distortions from the interiors.

ClimaGuard™

Guardian™ Climaguard™ range of products provide all season thermal protection with very high light transmission. Can be used on surface #2 or on surface #3, in combination with a Solar or HD product or alone.

Speciality Glass

Free yourself from the limitations of ordinary glass. Our Speciality Glass solutions redefine technology-driven performance with a breadth of choices, all in one place. From light control to shower protection, Guardian Speciality Glass expands the creative possibilities of glass and allows you to experience the great outdoors.

Triple Silver product range

Double Silver product range

Speciality Glass

Single Silver product range

SunGuard™ Solar

SunGuard™ HD & HD Plus

ClimaGuard™

Projects Overview

Guardian Glass products are used on buildings and homes around the world. Nagivate through numerous projects illustrating how our glass has helped teams push the barriers of their own imaginations.



Gateway Residence

Residential, Ras Al Khaimah

Located on the main island at the heart of Mina Al Arab community in Ras Al Khaimah UEA, the contemporary, low-rise residential tower has been designed with a free-flowing facade, which reflects the surrounding elements of nature and offers an outstanding panoramic sea view.

SunGuard™
Double Silver
DS Grey T



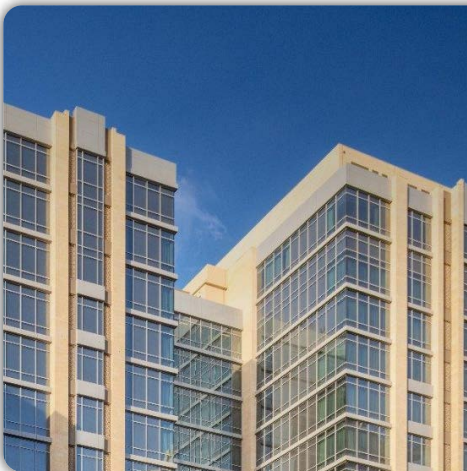
The Exchange Tower

Luxury Commercial Tower, Dubai

Guardian SunGuard™ HD Colors Blue provides great solar insulation for your project, as well as vibrant colour. Solar insulation will help reduce electricity costs as well as increase occupant comfort. The stunning blue colour will add character to your project.

ClimaGuard™
HP Neutral 70

SunGuard™
High Durable
HD Blue



Diar Al Hasa

Residential, Saudi Arabia

The Diar Al Hasa residential complex in Saudi Arabia is a unique place to live. The houses benefit from Guardian's distinctive bronze coloured Guardian SunGuard™ DS Bronze T glass. The glass helps provide high thermal insulation, optimal inside temperatures, and the high external reflection provides some privacy to the building's occupants, while the low internal reflection allows clear views to the outside.

SunGuard™
Double Silver
DS Bronze T

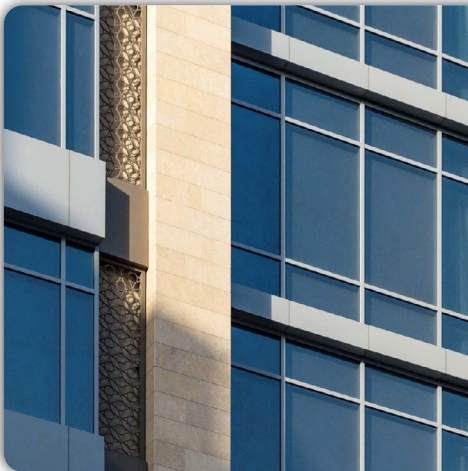


Dubai Opera House

Iconic Landmark, Dubai

The performance tuned SN multi-functional coatings offer high selectivity solar protection on a neutral-looking glass for a wide range of applications such as fully glazed facades, roof glazing and large framed windows.

SunGuard™
SuperNeutral
SN 70



New VISA Headquarters building

Office Building, Dubai

The architect used two different aesthetics, Guardian SunGuard™ Double Silver (DS) Steel Grey T and SunGuard™ SuperNeutral (SN) 30T, to create a complementary contrast on one façade preserving thermal insulation and the performance of the glass.

SunGuard™
Double Silver
Steel Grey T

SunGuard™
SuperNeutral
SN 30 T



Dubai Frame



Iconic Landmark, Dubai

If you can imagine it, you can build it with SunGuard™ HP Neutral Plus 50. This high performance, Low-e glass allows architects the freedom to explore interior and exterior light. Typically, high transparency means high heat and ultraviolet light. With HP Neutral Plus 50, buildings minimise solar energy gain while allowing maximum visible light transmission for virtually any application.

SunGuard™
High Performance
HP Neutral Plus 50

Al Majdoul Tower

Office Building, Riyadh

Rising above the skyline of Riyadh, Al-Majdoul Tower is a stunning architectural landmark that combines beauty and functionality. Its unique twisted design is enhanced by the shimmering silver hue of Guardian SunGuard™ HP Silver 35, a high-performance glass product that help optimize the building's energy efficiency and comfort. The glass allows abundant natural light to fill the spacious offices, while reducing heat gain and glare.



SunGuard™
High Performance
HP Silver 35

Bascom Palmer Eye Clinic Abu Dhabi

SunGuard™
High Performance
HP Silver 35

Healthcare, Abu Dhabi

The stunning 70,000-square-foot Bascom Palmer Eye Clinic in Abu Dhabi broadcasts daily multiple reflections! Gresham Smith designed this unique building using Guardian SunGuard High Performance glass solution. The chosen HP Silver 35 offers a superior thermal insulation and its silver colour makes the clinic shine all day long.



Selected Project List

Project	Country	City	SQM
Zhejiang Broadcasting & TV Tower	China	Hangzhou	20,000+
Jingumae Project	Japan	Tokyo	19,000+
Damac Beirut	Lebanon	Beirut	19,000+
SYM	Thailand	Bankok	19,000+
Al Raha Beach	UAE	Abu Dhabi	29,000+
New Sabah Hospital	Kuwait	Kuwait	19,000+
AZIZIA Towers	KSA	Makkah	28,000+
Abraj Quartier Gateway Tower - AQ01	Qatar	Doha	28,000+
Trillium	Lebanon	Beirut	19,000+
Le Meridien Hotel in Riyadh	KSA	Jeddah	19,000+
140 West Street	South Africa	Johannesburg	8,000+
ADIA	UAE	Abu Dhabi	165,000+
Galleria Commercial Center in Tahlia Street	KSA	Jeddah	26,000+
Re-Opened Kempinski Tower (Al Sail Tower)	KSA	Jeddah	43,000+
California Compound - KSA	KSA	Riyadh	26,000+
Jeddah Airport	KSA	Jeddah	41,000+
Al Hammadi Hospital	KSA	Riyadh	26,000+
Opera House Dubai	UAE	Dubai	40,000+
Sukoon Tower	Bahrain	Juffair	26,000+
ADNOC HQ	UAE	Abu Dhabi	50,000
AL BALEED HOTEL PROJECT	Oman	Salalah	25,000+
3 Beirut	Lebanon	Beirut	19,000+
FARSI Tower	KSA	Jeddah	25,000+
Moveable Skylights - Mecca - Mekka	KSA	Makkah	17,000+
King Faisal Specialist Hospital and Research Center	KSA	Jeddah	25,000+
Quasar Project Lebanon	Lebanon	Beirut	11,000+
Al Mana Towers	Qatar	Doha	24,000+
Mashreq Bank Headquarters in Dubai	UAE	Dubai	10,000+
Ministry Of Water and Electricity	KSA	Riyadh	24,000+
Cintocare Pretoria Head and neck	South Africa	Pretoria	3,000
Pullman Hotels	Ethiopia	Addis Ababa	3,000

Selected Project List

Project	Country	City	SQM
The Address Residence Sky View in Downtown Dubai	UAE	Dubai	153,000+
King Khalid International Airport Terminal 5	KSA	Riyadh	24,000+
The Address Boulevard	UAE	Dubai	103,000+
Burj Marina, Doha	Qatar	Doha	24,000+
Damac Towers by Paramount in Downtown Dubai	UAE	Dubai	99,000+
King Fahed Medical City	KSA	Riyadh	24,000+
Cultural Center- The Museum	Kuwait	Kuwait	61,000+
King Faisal Hospital	KSA	Riyadh	24,000+
King Abdullah Specialized Children Hospital (KAMC-WR-Jeddah)	KSA	Jeddah	52,000+
BAKO CONVERSION	UAE	Dubai	24,000+
Al Jouf University	KSA	Jouf	47,000+
Old Mutual Building	South Africa	Johannesburg	10,000+
Al Taif University	KSA	Taif	45,000+
Caspian Waterfront	Azerbaijan	Baku	23,000+
Kingdom Tower at Jeddah	KSA	Jeddah	42,000+
ROP Residential- Qurum Muscat	Oman	Muscat	22,000+
Al Majdoul Tower	KSA	Riyadh	41,000+
Distinction Tower	UAE	Dubai	21,000+
Kuwait International Airport	Kuwait	Kuwait	39,000+
AL THURAYA College	KSA	Jeddah	21,000+
RTCC in Al Khobar	KSA	Khobar	35,000+
Mixed Use Development in Al Qiyadah- Plot No.1337974	UAE	Dubai	20,000+
Sceco Head Office	KSA	Riyadh	33,000+
Technical college for Males in Jouf	KSA	Riyadh	20,000+
Madinah Airport	KSA	Madinah	33,000+
C1 & C2 Hotel Project in Abu Dhabi	UAE	Abu Dhabi	20,000+
Al Rajhi Bank H.Q	KSA	Riaydh	32,000+
King Abdulaziz University - Faculty Housing	KSA	Jeddah	33,000+
Palm Jumeirah Crescent	UAE	Dubai	29,000+
Jeddah Airport KAIA	KSA	Jeddah	29,000+

Project	Country	City	SQM
Hikma Headquarters	Jordan	Amman	10,000+
Ritz Carlton Amman Hotel and Residence Towers	Jordan	Amman	10,000+
ABDALI Gate Tower (Campbell Gray Living)	Jordan	Amman	12,000+
Gold's Gym Jordan	Jordan	Amman	10,000+
Al Murabaa Towers	Saudi Arabia	Riyadh	45,000
SABB HQ	Saudi Arabia	Riyadh	40,000
Security Forces Medical Hospital	Saudi Arabia	Riyadh	50,000
Security Forces Medical City Housing	Saudi Arabia	Riyadh	20,000
STC Administration Building	Saudi Arabia	Riyadh	45,000
Chamber of Commerce	Saudi Arabia	Khobar	30,000
Ajdan Rise	Saudi Arabia	Riyadh	45,000
King Faisal Air Academy in Majma'a	Saudi Arabia	Riyadh	60,000
V Tower	Lebanon	Beirut	10,000+
Boubyan second Tower	Saudi Arabia	Al Khobar	8000
Diyar AlHasa	Saudi Arabia	Al Hofuf	50,000
Farwaniya Hospital Expansion	Kuwait	Kuwait	30,000
Al Kout Mall - Extension	Kuwait	Kuwait	30,000
Ministries District	Egypt	Cairo	500,000
Administrative Control Authority	Egypt	Cairo	80,000
Arab Contractors Towers	Egypt	New City Al-Alamein	110,000
ZED Towers	Egypt	6th of October	40,000
5A / Water Way	Egypt	Cairo	22,000
Mazareen	Egypt	New City Al-Alamein	120,000
Banque De Caire	Egypt	Cairo	15,000
National Bank of Kuwait	Egypt	Cairo	11,000
Arab African International Bank / 1-Ninety	Egypt	Cairo	14,000
Al-Salam Towers	Egypt	Alexandria	22,000
Uhuru Gardens Museums	Kenya	Nairobi	4,900
Trade development Bank	Kenya	Nairobi	4,500
CRDB Bank Headquarters	Tanzania	Dar es Salaam	6,000
National Petroleum Corporation Ghana	Ghana	Tema	1,800
The Dubai Mall Expansion	UAE	Dubai	10,000+



Guardian Glass Africa & Middle-East Hospitality Sector Service Proposition

A world of possibilities

Guardian Glass is one of the largest glass producers and innovators in the world. We've been working with glass since 1932, and yet the limitless potential of this amazing material still fascinates and inspires us every day. Through pioneering research, the dedication of our people and a firm belief in close collaboration with our partners and customers, we find new ways to build, design and inspire with glass. Building our expertise on each and every project, whether that's an iconic, energy-efficient building or a new glass coatings that will solve the challenges of today and beyond.

Global presence, bespoke solutions

We operate across five continents and serve over 160 countries. Working closely with clients and partners at a global, regional and local level to apply glass innovation across a hugely diverse range of projects. From the creation of architectural glass for world-renowned, landmark structures to the development of more sustainable living and working environments. In the process making some of the most ambitious designs and environmental targets in the world possible. Guardian Glass is operated by one of the world's largest private companies (Koch Inc).



120,000+ employees in about 60 countries with 60,000+ U.S. employees across 50 states & District of Columbia



\$125 B
IN ANNUAL
REVENUE



90%
EARNINGS
reinvested in the company



More than
\$150 B
invested in **GROWTH
& IMPROVEMENTS**
since 2003

About

4,000
PATENTS
PENDING



About

10,000
GRANTED
PATENTS

Find out more on guardianglass.com

Guardian Hospitality Sector Project Reference

Project	Country	City	Product
Burj Khalifa, Armani Hotel	UAE	Dubai	SunGuard™ Solar Silver 20 ClimaGuard™ NLT
Viceroy Hotel, W Hotel	UAE	Abu Dhabi	SG HP Neutral Plus 50
Burj Al Arab	UAE	Dubai	SG CR 08 Clear - Blue* SG SS 08 Clear - Silver*
Address Dubai Boulevard	UAE	Dubai	SG HP Neutral 40/23 SG HP Neutral 40
Address Beach Resort	UAE	Dubai	SG SN 40 T
Wafi Obelisk-Sofitel	UAE	Dubai	-
Warner Bros Hotel	UAE	Abu Dhabi	SG SN 50 T SG SNX 50 HT
Mangrove Rotana Hotel RAK	UAE	Ras Al Khaimah	SG SN 50 T SG Solar Light Blue 52
Creek Address (Grand Harbour)	UAE	Dubai	SG SN 40 T
The One At JVC	UAE	Dubai	SG DS Silver T
Rami Hotel Business Bay	UAE	Dubai	SG DS Grey T
Address Sky View	UAE	Dubai	SG Solar Silver 20 CG Neutral 70
Address Downtown	UAE	Dubai	SG Solar Silver 20 CG Neutral 70
Paramount Hotel, Damac	UAE	Dubai	SG DS 30 T
Anantara Mina Al Arab Ras Al Khaimah Resort	UAE	Ras Al Khaimah	SG DS Grey T
Royal M Hotel	UAE	Fujeirah	SG DS 40
Mangrove Rotana Hotel	UAE	Ras Al Khaimah	SG Sn 50 SG Light Blue 52*
Platinum Hotel Baghdad	Iraq	Baghdad	SG SN 30 T SG Solar Light Blue 52*
The Ritz Carlton, Amman	Jordan	Amman	SG DS Bronze T
Saint Regis Hotel Oman	Oman	Muscat	SG SN 60 T
Shatti Al Qurum Hotel for Eagle Hills	Oman	Muscat	SG DS Grey T
Le Meriedien Muscat	Oman	Muscat	SG Neutral Plus 50

*Discontinued product

Guardian Hospitality Sector

Project Reference

Project	Country	City	Product
OCEC Crown Plaza	Oman	Muscat	SG HP Aquamarine 40*
Movenpick	Oman	Muscat	SG DS Grey T
Saint Regis	Oman	Muscat	SG SN 66 T
Millenium	Oman	Muscat	SG Neutral 40
Hormuz Grand	Oman	Muscat	SG Neutral 40
Golden Tulip Hotel, Seeb Muscat	Oman	Muscat	SG Green Plus 50*
W Resort Hotel at Shatti al Qurum	Oman	Muscat	SG DS 50 T on Green*
Renovation of Al Bustan Palace Hotel	Oman	Muscat	SG DS Bronze T
Indigo Hotel - Jabel Akhtar	Oman	Muscat	CG Neutral 70
Hilton Double Tree - Qurum	Oman	Qurum	SG HD Bronze
Salalah Crown Plaza - Salalah	Oman	Salalah	CG Neutral 70
Faouh hotel - Liwa	Oman	Liwa	SG HD Grey
Hilton Garden Inn Hotel	Oman	Muscat	SG DS 50 T
Arjan Hotel at Azaiba	Oman	Muscat	SG DS Grey T
Doha Marriot Gulf Hotel	Qatar	Doha	SG SN 29/18 HT on UltraClear
Lusail Plaza Hotel	Qatar	Doha	SG SNX 50 on Ultra Clear
Le Meriden	KSA	Riyadh	-
One H hotel & appartment building	Pakistan	Lahore	CG Shadow Grey T
MOVENPICK Hotel (Resturant Area only)	Pakistan	Karachi	SG Neutral Plus 50
Windsor Hotel	Pakistan	Lahore	CG SUN T
Centarus (Top Floor New Resturant Area)	Pakistan	Islam Abad	SG DS 30 T
Luxus Hotel 1	Pakistan	Lahore	CG Neutral 70
Luxus Hotel 2	Pakistan	Attaabad	CG Neutral 70
Indigo Hotel (Hussain choawk)	Pakistan	Lahore	CG Neutral 70
Hotel The Gate	Pakistan	Lahore	SG HP Neutral 40
PC Hotel	Pakistan	Hunza	CG Neutral 70
Sareena Hotel	Pakistan	Hunza	CG Neutral 70
Platinum Hotel	Iraq	Baghdad	SG SN 30 T SG Light Blue 52*

*Discontinued product

Burj Khalifa - Armani Hotel

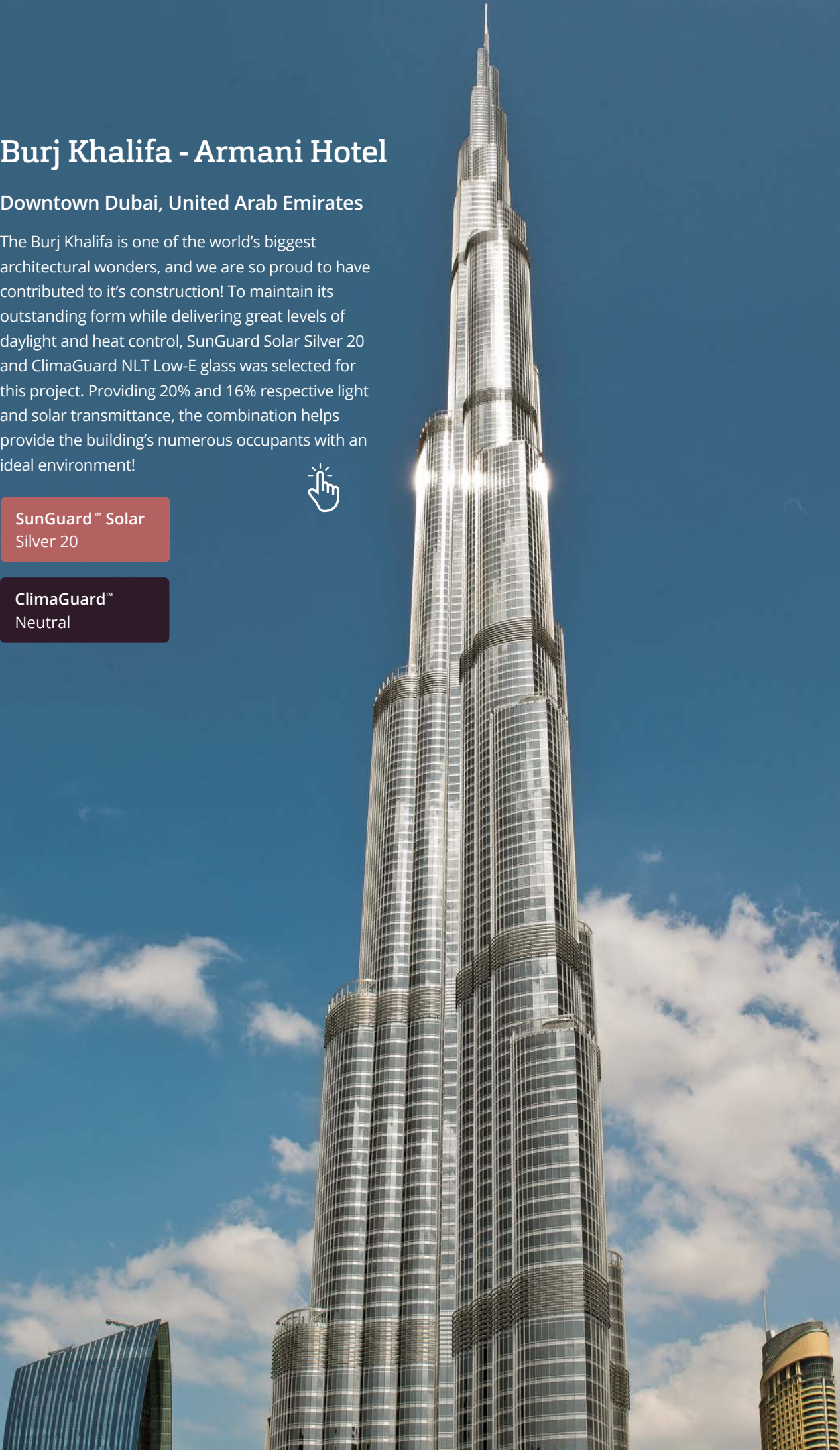
Downtown Dubai, United Arab Emirates

The Burj Khalifa is one of the world's biggest architectural wonders, and we are so proud to have contributed to it's construction! To maintain its outstanding form while delivering great levels of daylight and heat control, SunGuard Solar Silver 20 and ClimaGuard NLT Low-E glass was selected for this project. Providing 20% and 16% respective light and solar transmittance, the combination helps provide the building's numerous occupants with an ideal environment!



SunGuard™ Solar
Silver 20

ClimaGuard™
Neutral

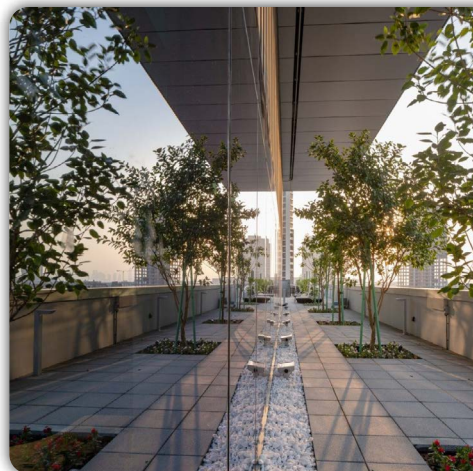




Address Downtown

Downtown Dubai, United Arab Emirates

SunGuard™ HP
Neutral 40



The First Collection @ JVC

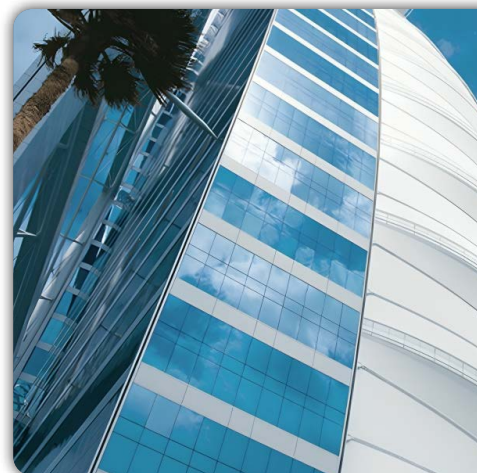
Jumeirah Village Circle, Dubai,
United Arab Emirates

Operator: The First Group

Architect: Norr Group Consultants International

SunGuard™
Double Silver
Silver T





Burj Al Arab

Dubai, United Arab Emirates

The “Tower of the Arabs” is the world’s tallest structure incorporating a membrane facade. It was built to resemble the sail of a dhow (Arab sailing vessel) and intentionally placed so that its shadow does not cover the beach. The glass sides facades were complimented by Guardian Glass.

SunGuard™
CR 08 Clear
Blue

SunGuard™
SS 08 Clear
Silver

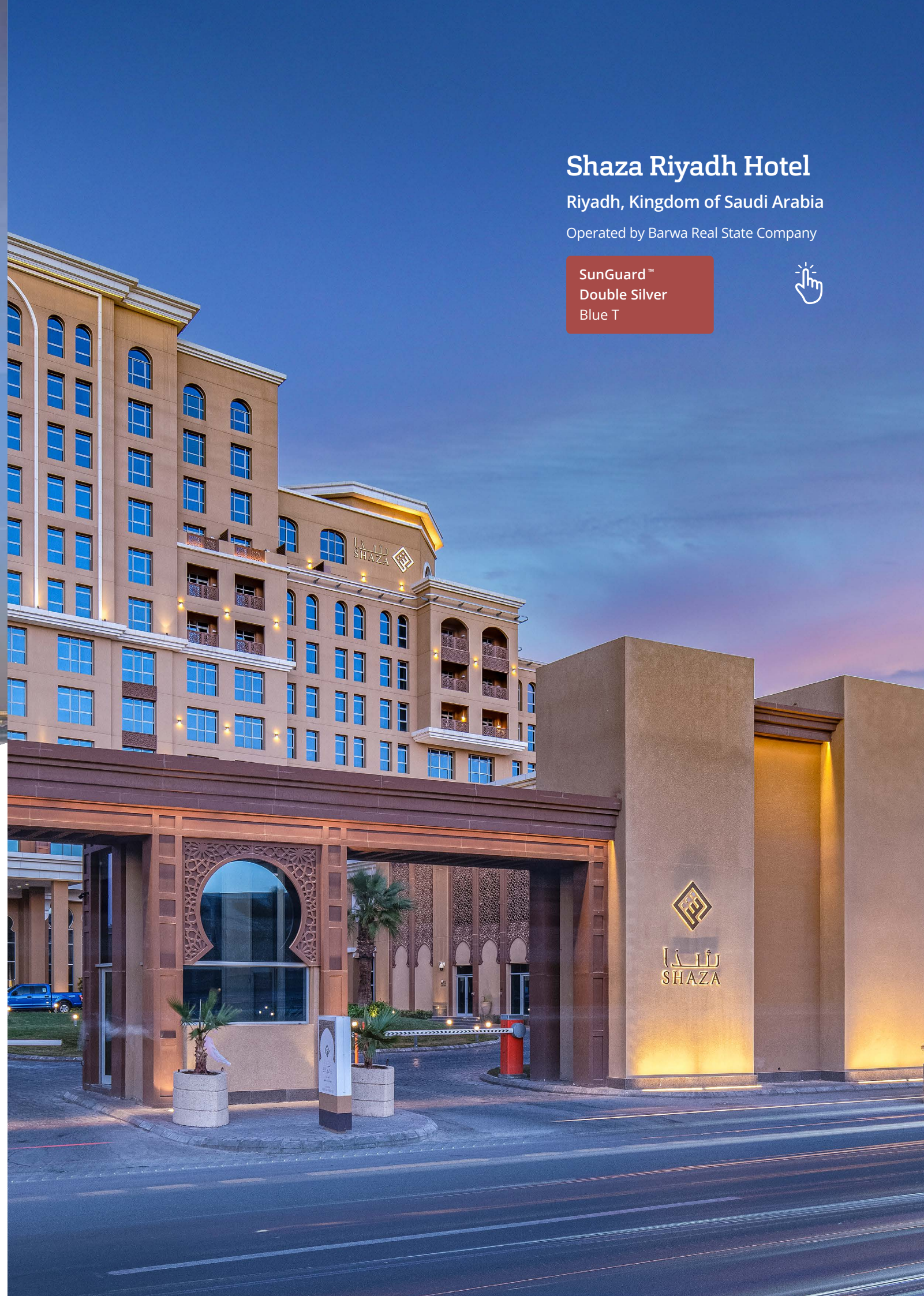
*Both products have now been discontinued.

Shaza Riyadh Hotel

Riyadh, Kingdom of Saudi Arabia

Operated by Barwa Real State Company

SunGuard™
Double Silver
Blue T

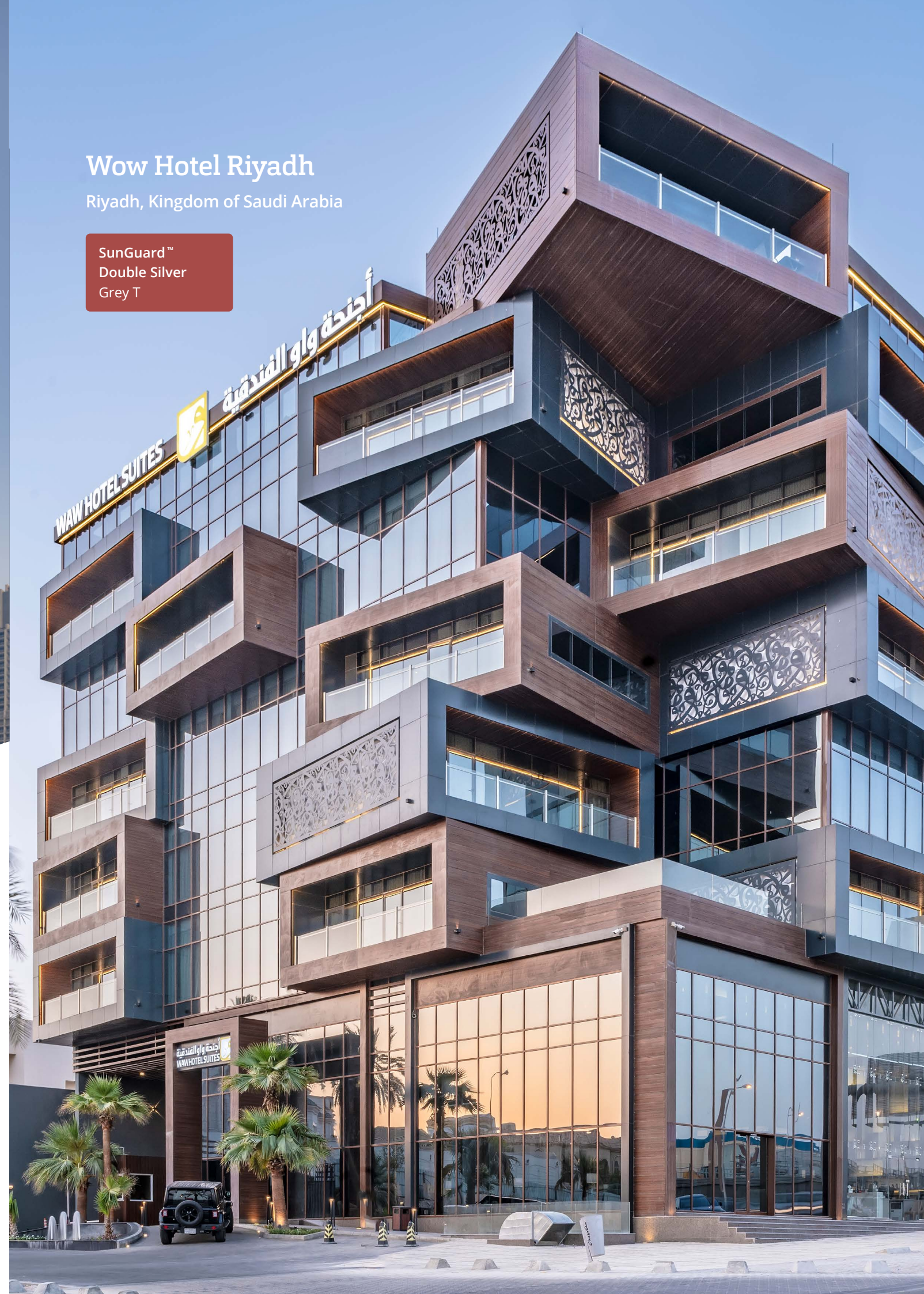




Wow Hotel Riyadh

Riyadh, Kingdom of Saudi Arabia

SunGuard™
Double Silver
Grey T



Address Beach Resort

Dubai, United Arab Emirates

Nestled in the heart of Dubai's most prestigious district, this luxurious hotel is a veritable masterpiece. The renowned Killa Design chose to magnify the project using Guardian SunGuard DS Silver T and SunGuard SN 40T glass. The combination provides outstanding thermal insulation while flooding the entire structure with an abundance of glorious natural light.

SunGuard™
Double Silver
Silver T

SunGuard™
SuperNeutral
40 T



Address Sky View

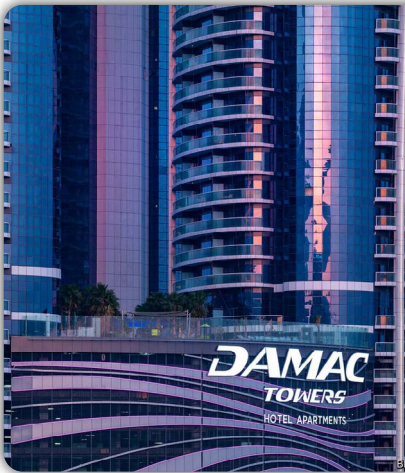
Dubai, United Arab Emirates

Architect: Norr Group



SunGuard™
Solar Silver 20

ClimaGuard™
Neutral 70



Paramount Hotel (DAMAC Towers)

Dubai, United Arab Emirates

Architect: Khatib & Alami

Located in the heart of the stylish Burj area in Dubai, Damac Towers by Paramount was designed using our SunGuard® DS 30 T glass for its high levels of light transmission and solar heat control.

SunGuard™
Double Silver
30 T





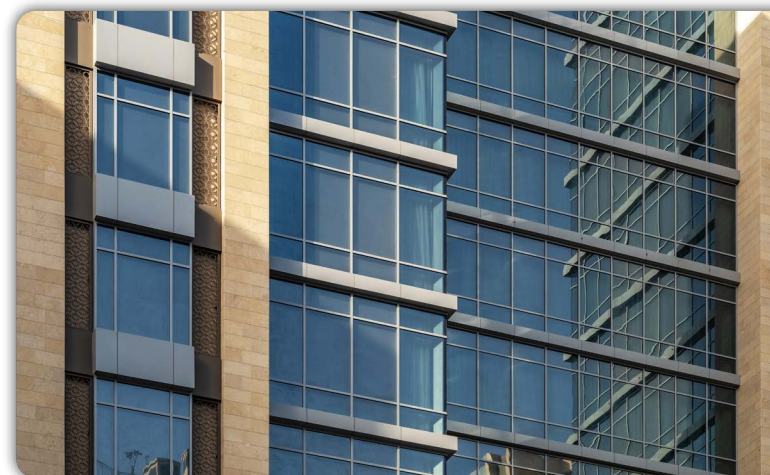
Yas Viceroy (W Hotel)

Abu Dhabi, United Arab Emirates

Architect: Asymptote Architecture

Glazier: Alumco

SunGuard™
HP Neutral
Plus 50



Deira Waterfront

Dubai, United Arab Emirates

SunGuard™
Double Silver
Grey T





Technical Services and Support

SunGuard Select Fabricator Program

Become a SunGuard Select Fabricator

As SunGuard® has grown, the Guardian Select Fabricator network has also grown. To provide resources, service and support more specifically aligned with the business needs of each fabricator, Guardian is introducing tiers within the Select program; Select Advantage and Select Elite.

We offer a program of certification for our most advanced coated products, our team of experienced "Field Certification Engineers" can support you in becoming a "Sunguard Select Fabricator."



Guardian Select Elite Fabricator

The Elite program goes a few steps further. Open to all Select fabricators who commit to the program parameters and meet the certification criteria and have the capacity to meet and maintain capability and quality standards, the Guardian Select Elite Fabricator program is an option for Select Fabricators who possess world class fabrication capabilities. Learn more: www.guardianglass.com/me/en/our-glass/become-our-partner/fabricator-program

Guardian Select Optical Quality (SOQ).

A new specification has been developed, Select Optical Quality (SOQ), that mirrors Elite fabrication quality requirements.



Ritz Carlton Amman

Amman, Jordan

SunGuard™
Double Silver
Bronze T

SunGuard Select Fabricator Program



Active support during Glass Processing

Real time technical assistance during glass processing at your facility. This can be conducted either at your facility or by remote operation.



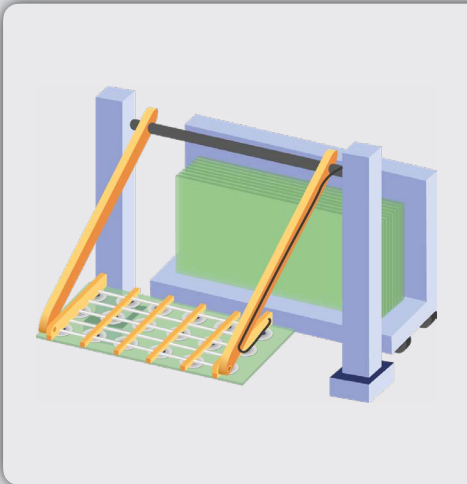
Setup trials for certification purposes

Technical assistance for the initial adjustments of your equipment to reach the best quality for finished products.



Trainings and Seminars by our glass experts

From glass basics to very specific glass applications, our experts share their knowledge with you to help you see what's possible with glass and make your project happen.

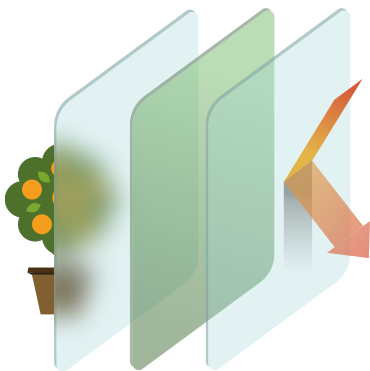


Recommendations for new equipment purchasing/ Maintenance Repairs and Supplies (MROs)

Guardian Glass can assist you in choosing optimal equipment for your factory, and advise on the most efficient factory layout to maximize productivity.

Glass Makes It Possible

Guardian Glass has developed a set of analytical tools to help educate architects and specifiers, as well as students, on the energy implications of various glass coatings.

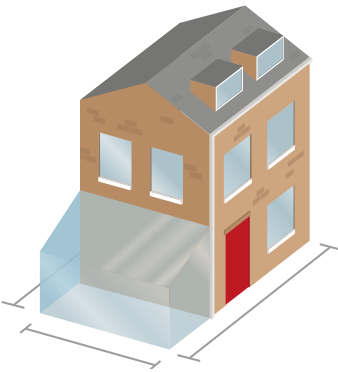


Product recommendations based on our customer requirements

Whether you need glass for façades or any architectural application Guardian Glass can help you find the right glass to suite your need.

Access to Guardian Glass Analytics Software Tools

As a Guardian Glass client, you gain access to the Guardian Glass Analytics tool, helping you visualize and accurately calculate the performance of your Guardian Glass product. Glass product, including the possibility of performing embodied carbon (CO2eq.) calculations of various configurations.

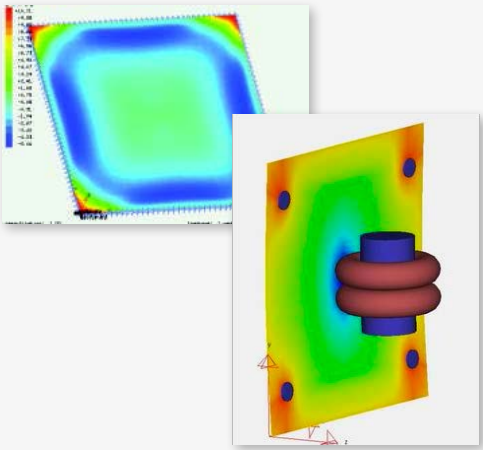
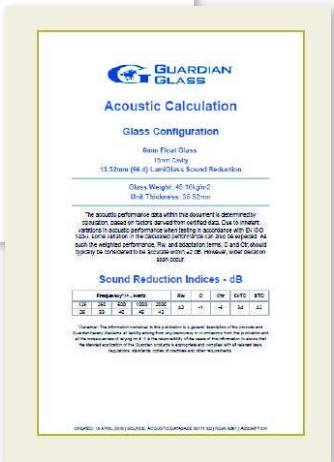
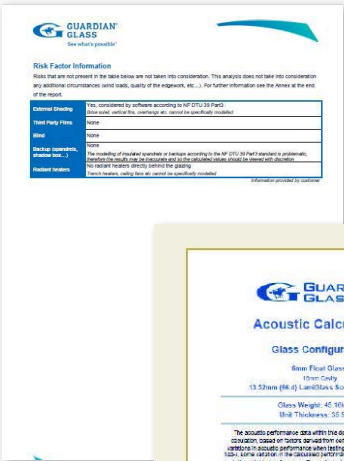


Building Energy Calculator

The building energy calculator uses the makeups created in the performance calculator to compare energy cost, consumption and financial payback information. This schematic design tool makes calculations based on hourly simulations of glazing options, building parameters and project location. The Building Energy Calculator can be used to compare annual energy costs for a variety of climate zones.

Technical support that goes above and beyond your expectations

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Assessment of the risk of thermally induced breakage

Recommendations regarding the necessity of glass heat treatment and its edge quality based on a specific facade design.

Acoustic Assistant

The Guardian acoustic assistant is a tool to estimate acoustic performance of different types of glazing. User's have the option to estimate the acoustic performance of glazing, find glazing solutions for an acoustic performance, or directly access/view the acoustic performance table.

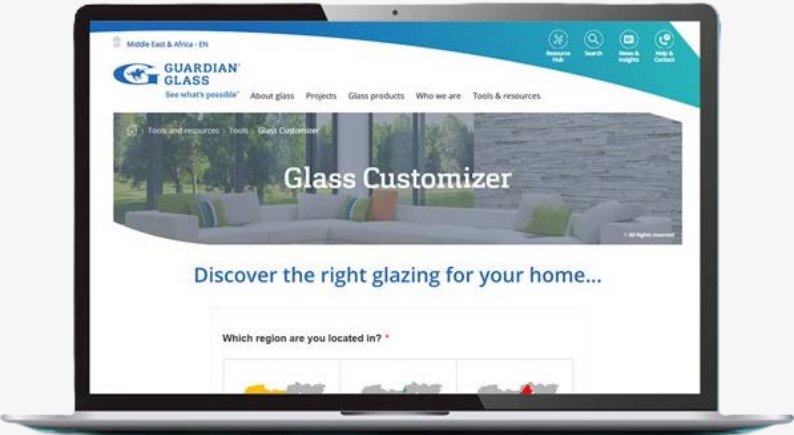
Determination of static requirements

Recommendations of glass compositions and thickness based on specific conditions. Checking the deflection and stress of a certain glass size and thickness.

Window Glass Customizer

The online Window Glass Customizer offers personalized glazing recommendations for your home, tailored to your specific needs.

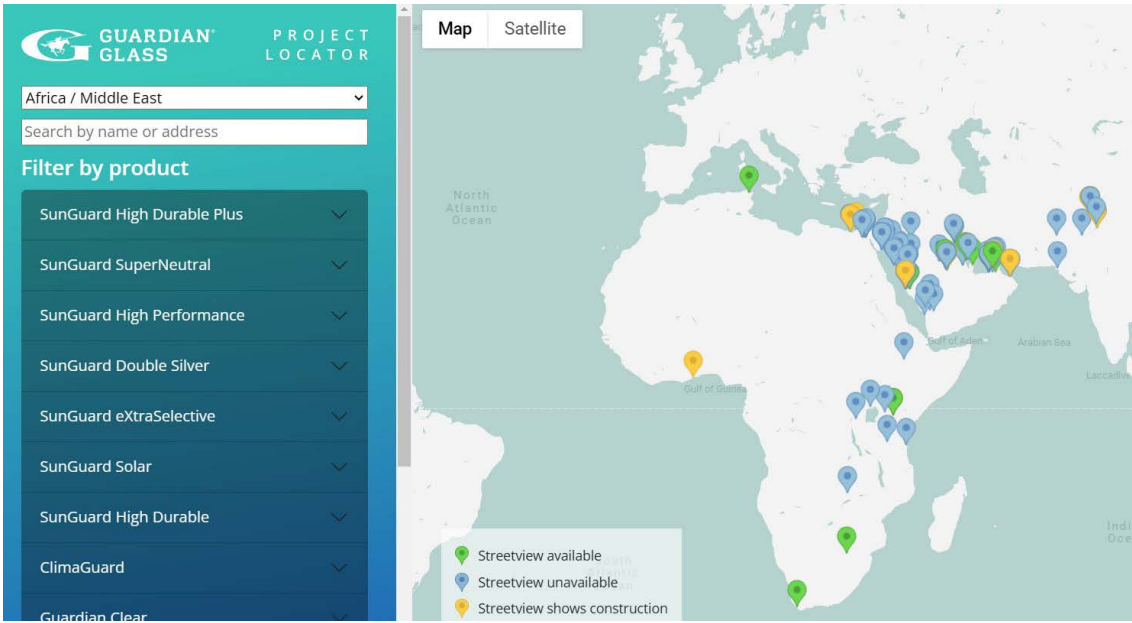
www.guardianglass.com/me/en/tools-andresources/tools/glass-customizer



Guardian Project Locator

Explore Guardian Glass projects in your area and beyond with Google Street View and be inspired by the possibilities.

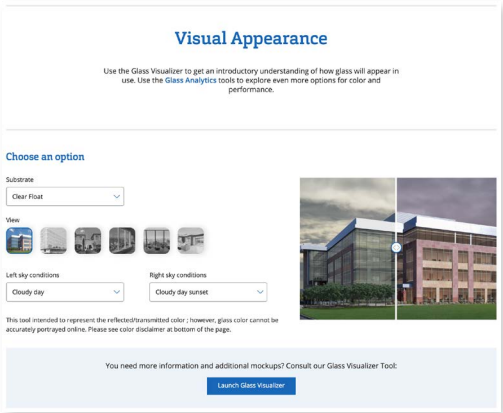
<https://digitaltools.guardianglass.com/tools/projects/>



Visualize Glass Possibilities

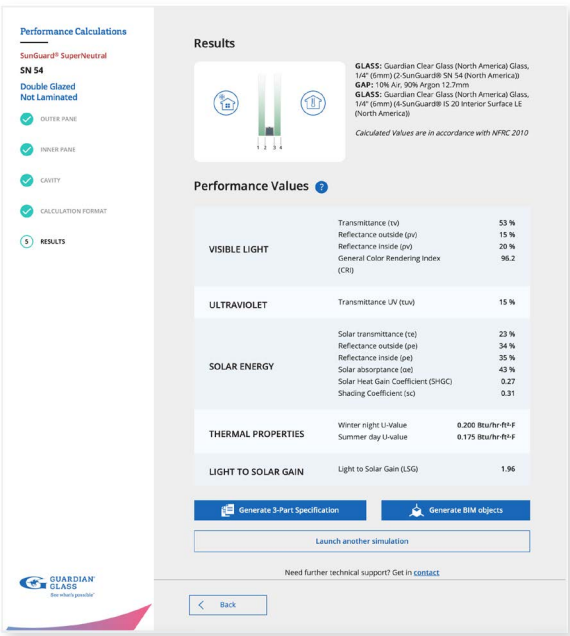
How about a tool, that lets you exactly see what's possible?

Guardian Glass Visualizer allows you to evaluate the aesthetic properties of virtually any glass application in different climatic conditions, both with external and internal views.



Guardian Glass for BIM

Powered by FenestraPro, is a plug-in that functions within AutoDesk Revit workflow to demonstrate the energy performance implications of glazing design options.



LEED

Guardian supports the Leadership in Energy and Environmental Design (LEED) rating system and the U.S. Green Building Council (USGBC), a coalition of building industry leaders who promote and create environmentally responsible structures. We are also part of the federal ENERGY STAR® program, aimed at increasing energy efficiency and reducing greenhouse gas emissions.

Supporting your LEED strategy

LEED for New Construction is a voluntary standard for developing high performance sustainable buildings. Using SunGuard glass can boost your LEED score in up to six categories, including: Energy and Atmosphere (EA) as well as Materials and Resources (MR). Guardian SunGuard® line offers the largest selection of post-temperable, sputter-coated glass. These advanced coatings not only offer enhanced indoor environments but can also improve the energy efficiency and operational carbon of buildings.

We now have a dedicated team of certified LEED Green Associates who can support you in all aspects of the LEED rating system.

Product Declarations and Certifications

Environmental Product Declarations (EPD) Information about the life-cycle environmental impact of our products. **Health Product Declarations (HPDs):** The Health Product Declaration (HPD) Open Standard provides a framework for product manufacturers to disclose the materials used in the manufacture of their products and associated health information.

Click here to explore the **Stewardship Report** for Guardian Glass: <https://www.guardianglass.com/me/en/who-we-are/stewardship>

Safety Data Sheets: Guardian Glass provides voluntary Safety Data Sheets (SDS) covering all uncoated, sputter (vacuum) coated, laminated, and UltraMirror™ products produced globally.

See Certifications section: <https://www.guardianglass.com/me/en/tools-and-resources/product-declarations>



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Guardian Glass Middle East

Find out more on guardianglass.com

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