



ROYAL TINT®

est. 2016

PRODUCT CATALOGUE

Consciously Transforming



# ROYAL TINT

Royal Tint was founded on 2016 in India, on the principle of supplying high-quality smart glass.

PDLC film is a distinctive product in itself. With hard work and persistence, we have successfully delivered client satisfaction and established an empire throughout India. We provide world-class Services, Support & Quality. Having experienced significant and continuous growth since its foundation, Royal Tint has established its own Manufacturing unit of smart glass in 2020.

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# What is Smart Glass?

## A TECHNOLOGY USED FOR SMART GLASS & SMART FILM

ROYAL TINT Switchable film, is capable of adjusting light transmission between transparent and opaque. Switchable film can be directly installed on existing Glasses with self-adhesive. It combines many functions, such as light adjustment, UV and infrared blocking. Advantages of smart film is it eliminates the need for blinds, shades or window treatments.

As a crucial elements of modern design, glass separations provide access to a natural light and open views.

POWER ON



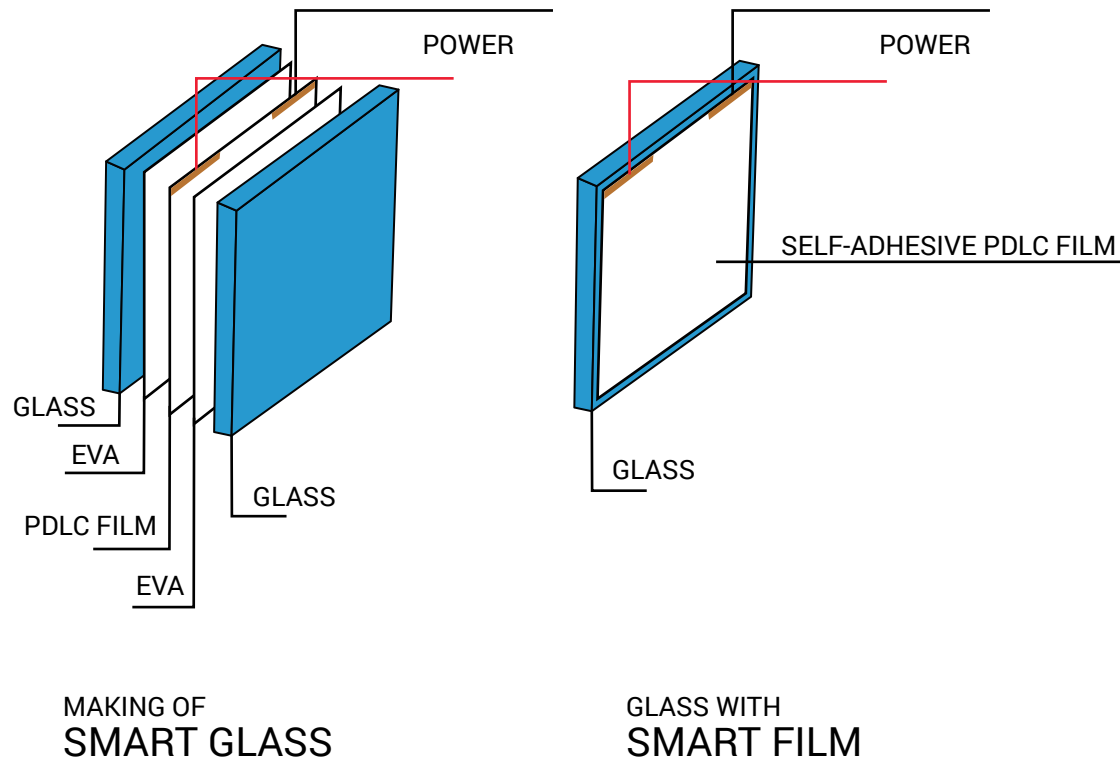




POWER OFF

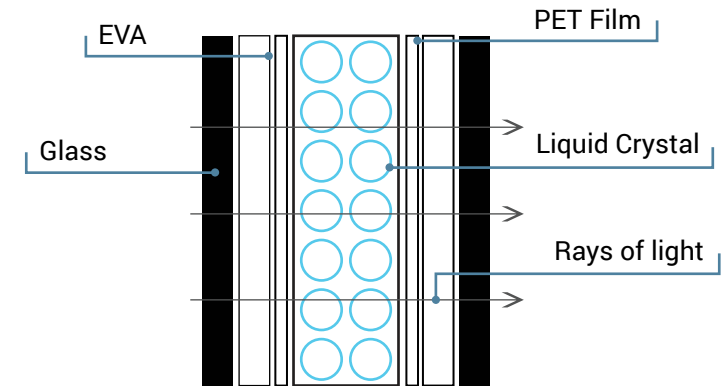
# THE CORE TECHNOLOGY

Switch off the current and the glass turns opaque. Reactivate the current and the glass reverts to a clear, transparent view. This ingenious technology involves a film of dispersed liquid crystal in a polymer matrix pressed between two glass sheets. When a small current is applied to the liquid crystal, its molecules align allowing light to pass through. When the current is disconnected, the molecules immediately disarrange for instantaneous and total privacy.



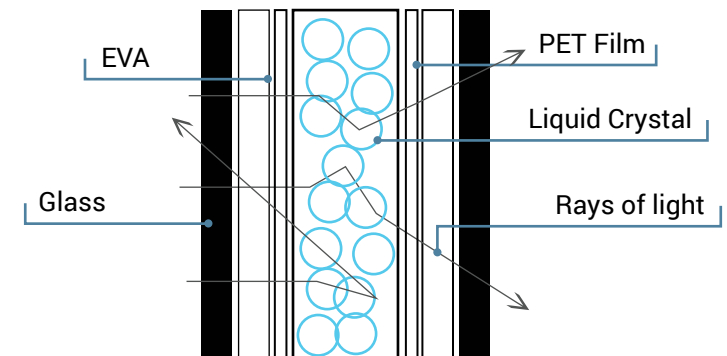
## POWER ON

THE LIQUID CRYSTAL MOLECULES ALIGN AND LIGHT CAN PASS THROUGH



## POWER OFF

THE LIQUID CRYSTAL MOLECULES ARE RANDOMLY ALIGNED MAKING LIGHT SCATTER AND THE GLASS OPAQUE.



# TECHNICAL DATA

## ELECTRICAL PERFORMANCE

Working Temperature	-20°C +70°C
Storage Temperature	-30°C +70°C
Working Temperature	-20°C +70°C
Current	0.08A/m <sup>2</sup>
Power Consumption	5w/m <sup>2</sup>

## OPTICAL PERFORMANCE

Visible Angle	>140
Switching Speed	>10ms
Switch Lifetime	>200000 (ON/OFF)
Lifetime	>80000 Hours
Viewing Angle	>140:
UV / infra Block	>98%

## POWER SUPPLY TECHNICAL PARAMETER

Output Voltage	48 – 65V(AC50/60HZ)
Output Power	4W- 1000W; & 5W-1000W
Output Current	0.01A – 20A

## SWITCHABLE SMART GLASS

Thickness	5+5, 6+6, 8+8 (mm)
Max Width	2.0 m
Max Length	3.66 m
Transmittance	82%

## SWITCHABLE SMART FILM

Thickness	0.40 mm
Max Width	1.8 m (Adhesive), 2.0 m (Non-Adhesive)
Max Length	3.66 m
Transmittance	85.5%

# OPERATION CONTROL

Royal Tint Smart Glass can be controlled in multiple ways, to reach different levels of privacy. Simply choose whichever method best suits you and start operating your switchable smart glass.



DOMOTICS



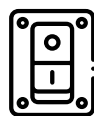
REMOTE CONTROL



SMART PHONE



DIMMER



SWITCH



MOTION SENSOR







TRANSPARENT OPAQUE

# CORPORATE



# HOSPITALITY





# SKYLIGHT



# RESIDENTIAL





**Dark Grey**

**LightGrey**

**Transparent**

**Black**

**White**



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# REAR PROJECTION FILM

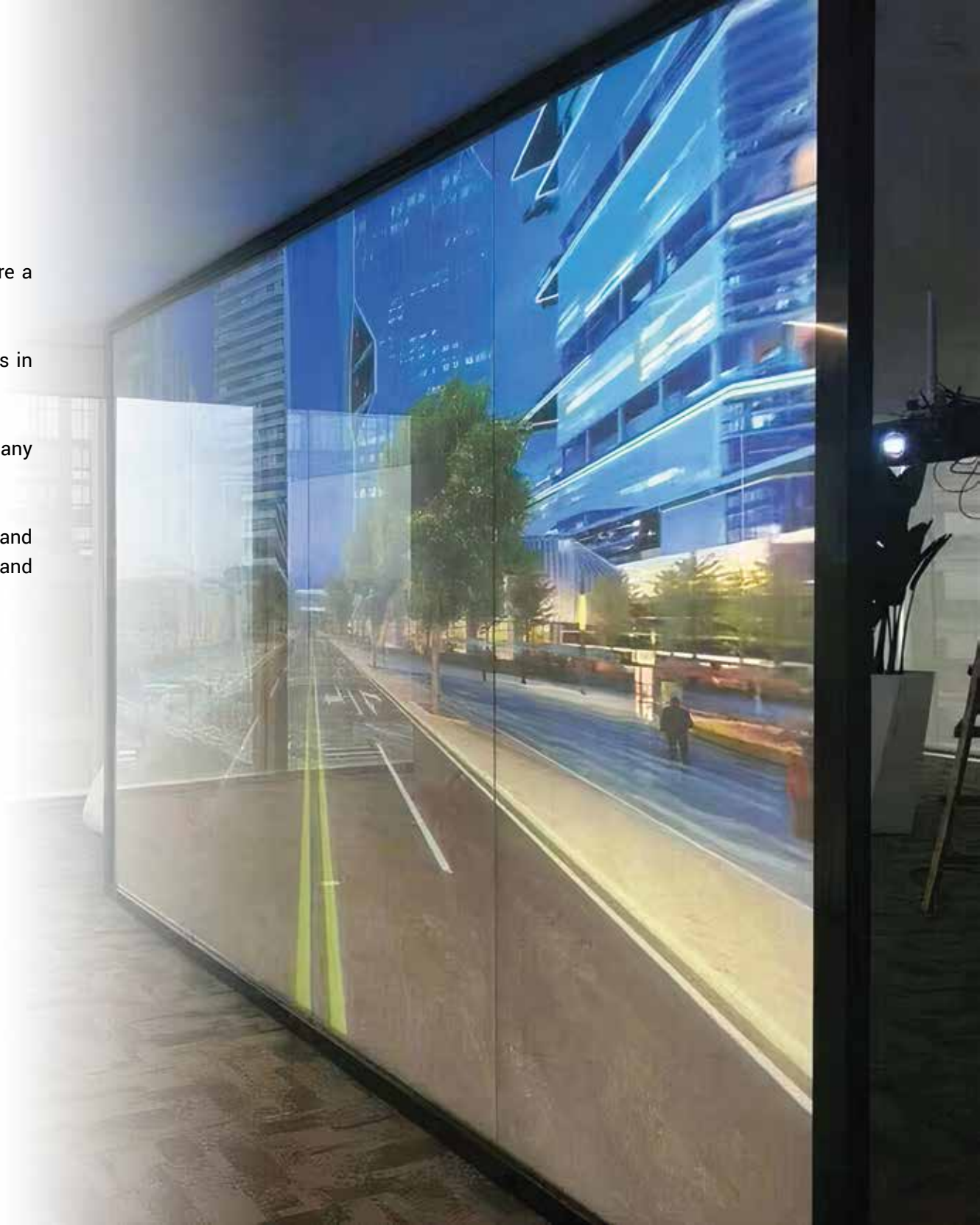
Rear Projection Film turns regular glass into a projection screen, where a projector needs to be installed in the back of the screen.

Each of our Projection Films has got distinctive characters and comes in various types.

It has a water-activated adhesive base Product & is Compatible with any projector.

Our unique optical film technology offers superior brightness, contrast, and black levels even in high ambient light or daylight for promotion Display and presentation.

<b>Type</b>	Matt
<b>Application</b>	Glass/ Acrylic
<b>Raw material</b>	PET - Adhesive
<b>Glue</b>	Acrylic transparent glue
<b>Thickness</b>	4 mil
<b>Roll size</b>	1.52*30m







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# PHOTOCHROMIC FILM

Royal Tint brings you a unique product to control sunlight. This film has created to work for both daytime and night-time.

The photochromic film is used for windows glass & vehicle glass.

The photochromic film is a unique film it contain pigments that allow sunlight to make your windows darker in the daytime and then back to being very light at night-time.

Photochromic film reacts to the sunlight intensity and becomes darker to reduce the solar heat gain and glare.

Photochromic non-electrified films provide automatic sunlight control all day long.

Blocks 99.9% of the Sun's UV Rays.

Blocks over 90%+ of the Sun's Infrared Heat transmitting through the glass which helps save on cooling costs,

Reduces the sun's glare and provides more comfortable environmental view.

	<b>V70+</b>	<b>V60+</b>	<b>S70+</b>
<b>Thickness</b>	3 mil	3 mil	3 mil
<b>VLT : Visible Light Transmission</b>	75%-30%	69%-25%	75%-23%
<b>IR : Infrared Rejection</b>	86%-90%	93%-95%	86%-90%
<b>VLR : Visible Light Reflection</b>	11%	11%	11%
<b>UVR : Ultraviolet Rejection</b>	99%	99%	99%
<b>TSER : Total Solar Energy Rejected</b>	61%	67%	57%
<b>SHGC</b>	0.47	0.47	0.49
<b>SR Hardness</b>	>2H	>2H	>2H
<b>Roll Size</b>	1.52*30m	1.52*30m	1.52*30m

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## DICHROIC FILM

Dichroic Films shift through a rainbow of colors from a change in light or movement. It is produced by stacking layers of glass and micro-layers of metals or oxides which gives the glass shifting color depending on the angle of view.

The shimmering, color-shifting effect of the film is a magnificent addition to any space and is visible from both sides of the glass or product.

The film offers maximum flexibility of bend it, pattern it or apply it with different glass types of interlayer adhesive.

It can be applied on glass partition wall, interior-exterior glass to give the best artistic view.

<b>Type</b>	Glossy
<b>Color</b>	Chameleon Blue / Red
<b>Application</b>	Glass / Acrylic
<b>Raw material</b>	PET - Adhesive
<b>Glue</b>	Acrylic Transparent Glue
<b>Thickness</b>	2 mil
<b>Roll Size</b>	1.5*30m

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## FURNITURE PROTECTION FILM

It is a material designed for bright, reflective and fully transparent without changing the original colour of the furniture.

This product prevents furniture surface from scratches and damages. UV-proof to prevent furniture fading old.

This film material is self-adhesive which is applied to remove the back protection layer.

We are able to provide you variety of Segment of this film which is relevant to microns difference.

<b>Type</b>	Glossy / Matt
<b>Color</b>	Transparent
<b>Application</b>	Marble / Corien / Furniture
<b>Raw material</b>	PET - Adhesive
<b>Glue</b>	Acrylic Transparent Glue
<b>Thickness</b>	2 mil, 6 mil
<b>Roll Size</b>	1.52*30m

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# SAFETY FILM

Safety films are designed to perform under adverse conditions.

This product offers UV protection as well—blocking up to 98% of damaging ultra-violet rays.

Safety films are easy to install and prevent the glass from splintering on impact. Their quality material gives additional strength and reduces glare.

It protect from break-and-enter crimes to accidents and natural disasters, also helping to deter unwanted individuals from entering your home or business, protecting people.

<b>Visible Light Transmission</b>	96%	92%	88%	86%
<b>Thickness</b>	2mil	4mil	8mil	12mil

<b>Color</b>	Transparent
<b>Ultraviolet Rejection</b>	90%
<b>Raw material</b>	PET - Adhesive
<b>Glue</b>	Acrylic Transparent Glue
<b>SR Hardness</b>	>2H
<b>Roll Size</b>	1.52*30m

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## ANTI-FOG FILM

Anti-fog Film prevents the condition of water in the form of small droplets on a surface that resembles fog.

Due to super hydrophilic hard coating, water droplets can spread over quickly and no dew condensation.

They prevents mirror that produces fog, to prevent the formation of mist in the mirror above the fog.

Fogging most commonly occurs when there is a temperature differential between inside and outside of an enclosed atmosphere that time you can use this film on your glass surface or car mirror to view a clear picture.

<b>Type</b>	Glossy
<b>Color</b>	Transparent
<b>Application</b>	Bathroom mirror/building glass
<b>Raw material</b>	PET - Adhesive
<b>Glue</b>	Acrylic transparent glue
<b>Roll size</b>	1.52*30m

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# FASHA FILM

Fasha Film is a decorative film for glass surfaces. This film help to create stunning visual effects on interior glass surface, as well as add privacy and control light.

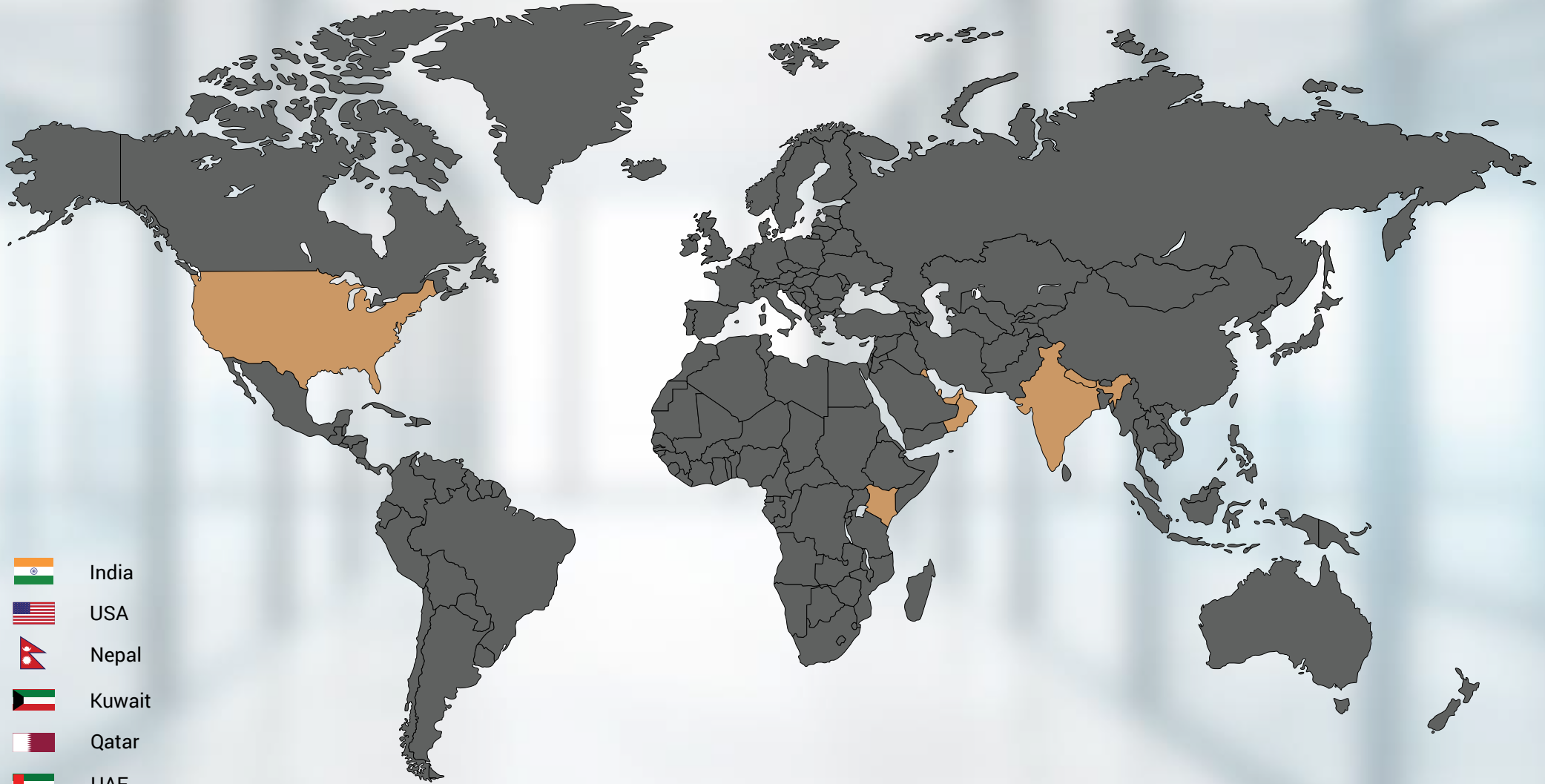
This product is a high-grade Film that helps to reduce UV Inhibitors block out 99% of ultraviolet light.

It creates a low gloss surface to reduce glare from natural/artificial lighting. Fasha provides the advantages of etched, cut, sandblasted, and textured glass at a fraction of the cost.

<b>Type</b>	Glossy
<b>Color</b>	White
<b>Application</b>	Glass / Acrylic
<b>Raw material</b>	PET - Adhesive
<b>Glue</b>	Acrylic transparent glue
<b>Roll size</b>	1.52*30m & 1.82*30m



# INTERNATIONAL OUTREACH



-  India
-  USA
-  Nepal
-  Kuwait
-  Qatar
-  UAE
-  Oman
-  Kenya





ROYAL TINT

## TRUSTED BY INDUSTRY

Our Clients understand the value of having a talented technology they can trust to get the job done. We value simplicity and with so many big corporate and residential project, clients are satisfied and believe their trust in us. Our Team has technically sound and professional that simplify technology, love to solve problems and focus on continual improvement every day.

Capgemini

Reliance

ICICI Bank

STAR

JUST IN TIME  
Leading Chain of Global Watch Brands

vatika

Modicare

airtel

accenture  
High performance. Delivered.

NORTHERN  
TRUST

novozymes  
Rethink Tomorrow

Mahindra





**ROYAL TINT®**

est. 2016

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