Traditional building solutions give you a choice from the above.

Smart Solutions Offer Both Green & Comfort.

With smart glass solutions, there is No Sacrifice. No Compromise.

Smart Comfort is Sustainable, Green Multi-Comfort.
In short, Today’s Glass solutions are designed to comfort all your senses.

THINK

SEE

SMELL

TOUCH

HEAR

THINK

BE MINDFUL.
BE SAFE.
SOLAR COMFORT
FIRE SAFETY GLASS
Life and property protection is essential. Almost 25,000 lives are lost because of fire in India. The need of the hour is a proper fire protection system which not only requires active fire protection components but also smart passive fire protection components. 0.8-1% of GDP is lost due to fire accidents in India.
Fire Resistant Glass is evaluated as a component of a complete fire resistive assembly. Glass alone will not be a passive protector.

**Fire Resistant Systems**

**EI Class Criteria:**
- Insulation
- A barrier to radiant and conducted heat transfer (≤140 °C)

**E Class Criteria:**
- Integrity
- To block smoke, flames & toxic gas.

**EW Class Criteria:**
- Radiation
- To reduce radiant heat transfer (limit 15 KW/sqm at 1m distance)

**Safety**
- 2 Hours of Fire Resistance
- High Sound Reduction
- Clarity in Vision

**Comfort**
- Energy Efficiency
- High Aesthetics
- Daylight Optimization
- Unhindered View of the Expanse
- Creating a sense of more Space

**Solar Control feature added to Fire Safety glass ensures best of both - safety and comfort.**
No Compromise on Safety.

on Comfort.

SEE
LAY YOUR EYES ON AESTHETICS
DAY LIGHTING
GLARE CONTROL
COLOR RENDERING
SEE
Need for the day
Connectivity
Comfort space to live/work
Benefit through Natural light
claustrophobic effect
Harvest natural light
Energy savings

Glass by nature
allows abundance of natural sunlight,

High Light Transmission
Visual discomfort
Glare
Use of curtains & artificial light

Optimized Light Transmission
Soothing natural light
No Glare
Blends interiors with exterior views
**Solar Control Glass**
- Light Transmission: 40%
- Average Lux Level: 292 lux
- Peak Lux level: 1240 lux

**Clear Glass**
- Light Transmission: 89%
- Average Lux Level: 4150 lux
- Peak Lux Level: 9200 lux

Outdoor Lux level: 9000 Lux
Room Size: 4m X 5m
Window Size: 1.0m X 2.4m (WWR: 12%)
Analysis: Ecotect Software

**Barely Glazed Bedroom**
- Opening Index: 16.4%
- Electricity Consumed: 4.2 kWh.m².year

**Largely Glazed Bedroom**
- Opening Index: 24.5%
- Electricity Consumed: 2.7 kWh.m².year
Improves productivity & comfort  
Reduces energy bills

**High Color Rendering**

Traditional blue base glass offers 82% color rendering, while today’s advanced glazing technology enables neutral base blue glass with 96% color rendering.

With its unique colour rendering feature you can have a clear inside-out vision from within the building, while the façade exterior shines in its blue brilliance.

**Optimum Day Lighting**

No Compromise on Aesthetics. on Functionality.
Climate responsive Design
Energy Efficient Facade

COLD CLIMATE
- Focused on thermal insulation

INTERMEDIATE CLIMATE
- Driven by energy balance

WARM CLIMATE
- Balancing between insulation and summer comfort

HOT CLIMATE
- Focused on low solar heat gain with low U value

LOCATION SPECIFIC NEEDS

TOUCH
YOUR IDEAS GET A PERSONAL TOUCH
THERMAL INSULATION SUMMER COMFORT
Spectral Selectivity

- Ratio of Light Transmission to Solar Gain & Higher value indicate high performance

Spectral Selectivity (Light Heat Ratio) = Visual Light Transmission \( \frac{SF}{SHGC/g} \)

<table>
<thead>
<tr>
<th>Brand</th>
<th>Light Transmission</th>
<th>SF/SHGC/g</th>
<th>Spectral Selectivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Online Coated – Solar</td>
<td>30%</td>
<td>46%</td>
<td>0.65</td>
</tr>
<tr>
<td>Offline Coated – Solar</td>
<td>46%</td>
<td>46%</td>
<td>1.00</td>
</tr>
<tr>
<td>Offline Coated – Solar + Thermal (Single Silver)</td>
<td>47%</td>
<td>36%</td>
<td>1.30</td>
</tr>
<tr>
<td>Offline Coated – Solar + Thermal (Double Silver)</td>
<td>60%</td>
<td>32%</td>
<td>1.87</td>
</tr>
<tr>
<td>Offline Coated – Solar + Thermal (Triple Silver)</td>
<td>60%</td>
<td>28%</td>
<td>2.14</td>
</tr>
</tbody>
</table>

24 x 365 : TGU

Glazing system that provides Solar control during SUMMERS & Thermal control during WINTERS Round the clock “solar-thermal” performance.
Influence of U value for a 24hr operation building

**Energy Analysis**

<table>
<thead>
<tr>
<th>Solar Radiation</th>
<th>Outside Temperature</th>
<th>Solar Irradiation</th>
<th>Outside Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.91 W/m²K</td>
<td>16</td>
<td>3.71 W/m²</td>
<td>16</td>
</tr>
<tr>
<td>0.81 W/m²K</td>
<td>16</td>
<td>3.61 W/m²</td>
<td>16</td>
</tr>
<tr>
<td>0.71 W/m²K</td>
<td>16</td>
<td>3.51 W/m²</td>
<td>16</td>
</tr>
</tbody>
</table>

**Total Heat Gain (Total Heat Loss)**

<table>
<thead>
<tr>
<th>Season</th>
<th>Summer</th>
<th>Winter</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.88 W/m²</td>
<td>177</td>
<td>27</td>
</tr>
<tr>
<td>0.91 W/m²K</td>
<td>16</td>
<td>3.71 W/m²</td>
</tr>
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</tr>
<tr>
<td>0.91 W/m²K</td>
<td>16</td>
<td>3.71 W/m²</td>
</tr>
<tr>
<td>Lower value is preferable. Higher value is preferable.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Dual Advantage Glass**

- Excellent selectivity.
- Very high emissivity.
- Low e glass with optimum solar control
- Soothing colors.
Dynamic Façade Glass

- Transition performance from clear view to high solar control at will.
- Transition control by solar sensor or manual over-ride.
- Weather responsive filtering of light transmission & solar heat gain,
  - Eliminates glare
  - Provides solar insulation
- Outstanding system durability,
  - Exterior façade
  - Skylights

No Compromise on Thermal Insulation, on Solar Comfort.
NOISE REDUCTION
ACOUSTIC COMFORT

Closed enclosure
Space constraint
Space utilization
Cost
Easy maintenance
Impact safety
Rich in Color
Plentiful Color Options - Choose Green, in any color.

Acoustic Comfort
Reduces resonant frequency problem
Rw ranges from 36dB (10.8mm) to 38dB (16.8mm)

Floor Space Efficiency
Replaces Traditional Wall Partitions
Increases Floor Space
Increases Occupancy Comfort

Aesthetics

Glass now offers comfort to your ears!

Dual Laminated lacquered self-standing glass partitions with PVB interlayer provides a sound absorptive barrier, that reduces noise.

Rw ranges from 36dB (10.8mm) to 38dB (16.8mm)

Replaces Traditional Wall Partitions
Increases Floor Space
Increases Occupancy Comfort

Rich in Color
Plentiful Color Options - Choose Green, in any color.
No Compromise on Space. on Comfort.

SMELL
WELCOME A BREATH OF FRESH AIR
MOISTURE MANAGEMENT VOC FREE
Today's Glass combines the visual depth of lacquer colors, and the longevity & resistance of glass to bring you – Lacquer Coated Glass.

- not a monotonous white space
- colors can change emotions, makes workplace exciting
- With glass visibility & livelihood made possible at workspace
- Low VOC
- Easy installation
Rich in Color

Plentiful Color Options - Choose Green, in any color.

Resistance to humidity
Resistance to fading
Lasts longer

No harmful VoCs in Interiors
Eco-friendly
Innovative application
Lead Free, Copper Free, Formaldehyde Free and Arsenic Free
Ensures high comfort and healthy environments

Eco-friendly
Innovative application
Lead Free, Copper Free, Formaldehyde Free and Arsenic Free
Ensures high comfort and healthy environments

No Compromise on Health. on Aesthetics.
Get ready to go Sustainably Smart.

Today’s advanced Glazing Technology helps you achieve “going green” without losing your high sense of aesthetics, or your priority for building safety or your maximum comfort.
Get ready to for Sustainability.

Designed by India & Make in India.