



Dear Readers,

It gives me immense pleasure to reintroduce the AIS Clariti Newsletter. This marks the beginning of a new chapter as we explore the latest advancements, innovations, and stories shaping the dynamic world of glass, including architectural solutions and automotive applications. From cutting-edge technologies and sustainable practices to industry trends and inspiring projects, we aim to keep you informed and engaged every step of the way.

In this edition, our Cover Story features a study on climate-responsive glazing for tropical countries. Our Case Study highlights a remarkable luxury service apartment project in Gurugram, transformed with innovative solutions from AIS Glasxperts.

The Spotlight on Excellence! section showcases an iconic building in Gurugram, now enhanced with AIS Ecosense glass — renowned for its energy efficiency and high performance. This edition also brings into focus AIS Windows Virtual Studio — a cutting-edge AR and VR solution enabling seamless window design personalisation.

We are excited to introduce the new Lite, Pro, and Select variants in the Natura and Chroma series from the sustainable Ecosense Edge range.

I hope you find this edition of AIS Clariti both insightful and inspiring. Your valuable feedback and suggestions for future topics are always welcome.

Happy Reading!

Vikram Khanna

CMO, COO – Consumer Glass & Architectural Institutional Business Asahi India Glass Limited



COVER STORY

Study on Climate-Responsive Glazing for Tropical Countries



With the rise in responsible construction activities, the Indian construction industry is increasingly leaning towards high-performance soft coat glass to meet the demands of energy-efficient buildings.

While the use of high-performance glazing surges, it also calls for climate-responsible product selection to ensure optimal glazing solutions.

This climate study identifies the optimal glazing solutions for a tropical country like India. The detailed study included a secondary data analysis from other tropical regions, an exploratory study with insights from industry thought leaders, and extensive primary data analysis through scientific energy simulations.

The primary data analysis looked at various climatic zones, building typologies, orientations, glazing quantities, and glazing types. This analysis covered energy consumption for heating and cooling loads, as well as lighting analysis, to determine the most effective glazing solutions.

Key findings of the climate study indicated that:



SHGC Over U-Value

In tropical countries like India, SHGC is more critical than U-Value, as direct solar radiation is a major contributor to heat ingress.



Solar Control Over Low-E

Rather than relying on double low-E glass, tropical regions require high-performance solar control glass with an optimal low-E property.



Optimum Light Transmission

Optimising light transmission (LT) is more effective than maximising it. With India's high natural illuminance levels, excessive LT can cause glare, while an optimal LT ensures sufficient lux levels.



Scientific Product Selection Approach

Glazing products should be selected using a tool-based, scientific approach that enables accurate simulations of building performance before operations, ensuring better energy efficiency.







The Challenge

Air by Ahuja Residences aimed to develop sustainable luxury service apartments in Gurugram, offering a peaceful, pollution-free environment with optimised energy efficiency and green building certification — all while maintaining aesthetic appeal.



The AIS Glasxperts Solution

- Seamless Glass Vestibules: Advanced glazing system and sealed glass vestibules helped reduce outdoor pollutants and maintain indoor air quality at an AQI of 50 or below, ensuring a healthier environment for residents. Integrated ventilation systems and completely sealed windows further ensure fresh, mountain-like air indoors, unaffected by external pollution levels.
- High Performance Glass and uPVC Windows: Improved energy efficiency by minimising heat transfer by 30%, reducing reliance on artificial cooling, and optimising energy consumption.
- Sustainable Solutions: Energy-efficient glass installations improved overall energy performance, leading to the successful attainment of the "Gold Green Building Certification" by IGBC (Indian Green Building Council).



The Result

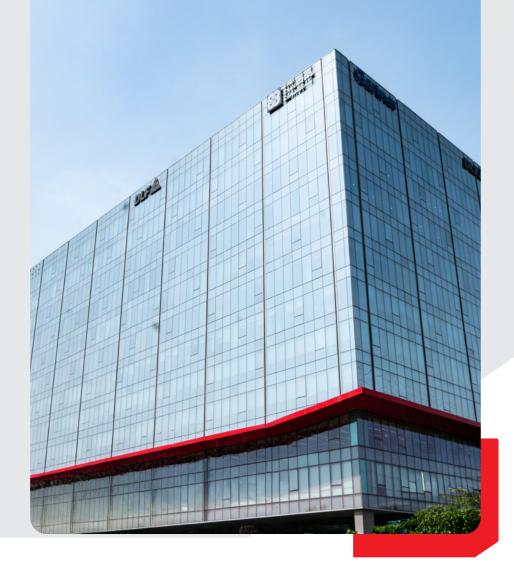
AIS Glasxperts' advanced glass and window solutions enabled Air by Ahuja Residences to achieve IGBC Gold certification by enhancing thermal insulation, minimising energy consumption, offering optimal daylight — creating a sustainable, energy-efficient, and serene environment.

SPOTLIGHT ON EXCELLENCE!

DLF Cyberpark, Gurugram

Enhanced by Exceed Platina (Solar Control Low E Glass)







INSIDE INFO

AIS Windows Virtual Studio:

Delivering a Revolutionary Design Experience

We are delighted to introduce AIS Windows Virtual Studio, an innovative platform that utilises the latest AR and VR technologies to transform static catalogs into interactive design possibilities, enabling customers to select and personalise their doors and windows.

This industry-first tool revolutionises the selection process with an interactive, real-time experience, allowing customers to explore vast design options suited to their needs and seamlessly bring their ideas to life.

What does the Virtual Studio include?



User-friendly interface for an enriching experience



Real-time visualisation



Extensive customisation options for colours, handles, glass types, and more



AR and VR-enabled environments for complete immersion



SaaS Model Backend for streamlined functionality



Both the AR and VR versions are now live. The AR version can be accessed online at **configurator.aiswindows.com**. Visit AIS Windows Experience Centres for the VR experience.

AIS FRESH

Ecosense Edge Natura and Chroma: Latest Additions to the High-Performance and Sustainable Ecosense Edge Series

We are excited to announce the launch of the Lite, Pro, and Select variants of Ecosense Edge Natura and Chroma—two advanced, energy-efficient glass series designed for superior performance. Both variants offer optimised solar control and thermal insulation along with excellent UV protection. These variants come in a clear substrate (Natura) and green substrate (Chroma).

Our latest offerings are engineered to meet the dynamic needs of various sectors including commercial and office spaces, healthcare facilities, educational institutions, and luxury residential buildings.







