SAINT-GOBAIN

LIGHT & SUSTAINABLE EDUCATIONAL INSTITUTIONS.

BUILT FOR THE FUTURE.

WRITING A NEW CHAPTER IN THE FUTURE OF CONSTRUCTION

Educational spaces today, need to support new-age learning, digital integration, and growing student populations. As expectations around safety, sustainability and seamless functionality continue to rise, designers and planners have a unique opportunity to create environments that enable uninterrupted learning, adapt to changing needs, and deliver long-term efficiency and performance.

THE NEEDS OF THE EDUCATION SEGMENT

In the education space, the 5 most sought-after needs are:

01

Safety
Educational environments require high-performance building systems that minimise injury risks and withstand impact under continuous usage. Durable flooring, protective coatings, and fire-safety systems contribute to safer spaces while ensuring compliance with stringent safety standards.

02

Indoor air quality
Indoor air quality is critical in educational spaces, as clean, well-ventilated environments support student health, improve concentration, and enhance overall learning outcomes.

03

Acoustics
Acoustic management is integral in enhancing speech clarity, reducing distractions, and creating an environment conducive to effective teaching and learning.

04

Efficient construction
Educational infrastructure demands efficient, scalable construction approaches that enable faster project delivery and adaptability to evolving needs. Advanced construction materials and systems support improved constructibility, reduced timelines, and Optimised lifecycle performance.

05

Energy-efficiency
With institutions operating for extended hours, maintaining comfortable indoor conditions while managing energy consumption is essential. Integrated insulation, surface protection, and moisture control systems contribute to improved thermal performance, reduced energy loads, and long-term operational efficiency.

The future of education design lies in achieving a harmony of safety, indoor air quality, acoustics, efficient construction and energy-efficiency, while adhering to **light and sustainable construction.**

01

CREATING SAFE LEARNING ENVIRONMENTS

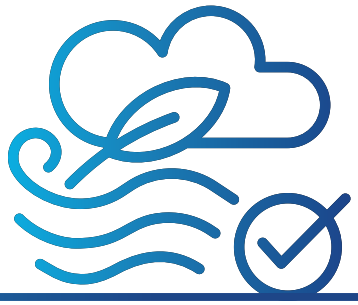
Educational institutions accommodate large numbers of students across different age groups, making safety a fundamental priority. Materials and systems used in these spaces must minimise risk, withstand everyday wear, and support safe movement and evacuation when required.

A thoughtful combination of Saint-Gobain's durable glazing like toughened glass, partitions and hardware, fire-rated partitions, and sturdy anti-skid flooring help create learning environments that are safe, resilient, and easy to maintain. These solutions enhance visibility where needed, support controlled access, and meet stringent building safety standards — offering reassurance to administrators, teachers, and parents alike.

Together, these integrated solutions help educational spaces remain secure, compliant, and conducive to uninterrupted learning.

02

BREATHING LIFE INTO SPACES



Indoor air quality is vital in educational spaces, as clean, well-ventilated environments support student health, reduce absenteeism, and enhance concentration and learning outcomes. Poor air quality can lead to discomfort, fatigue, and reduced cognitive performance, making it essential to ensure adequate ventilation and low-emission materials.

Saint-Gobain solutions such as low-VOC gypsum boards and plasters, Ecophon acoustic ceilings with low emissions, toughened lacquered glass for wall panelling and writing boards and insulation solutions contribute to healthier indoor environments. Combined with efficient ventilation systems, these solutions help maintain fresh air circulation, reduce indoor pollutants, and create safe, comfortable learning spaces.

03

BRINGING SOUND SOLUTIONS FOR BETTER ACOUSTICS

Acoustics are essential in educational spaces, as well-designed sound control enhances speech clarity, reduces distractions, and supports better concentration for both students and teachers. Poor acoustics can lead to fatigue, reduced comprehension, and ineffective learning environments, especially in classrooms, auditoriums, and collaborative spaces.

Saint-Gobain solutions such as Ecophon acoustic ceilings, acoustic windows and laminated glass partitions are designed to deliver superior sound absorption and clarity, creating optimal learning conditions. Complemented by Gyproc drywall systems and insulation, these solutions help control noise transmission between spaces while improving overall indoor comfort — ensuring quieter, more focused, and productive educational environments.

04

ENSURING MATERIALS, LIKE EDUCATION, LAST A LIFETIME

Educational facilities experience heavy daily use, making durability and ease of maintenance essential. Materials used across walls, ceilings, partitions, glazing, and interior surfaces must withstand constant activity while remaining easy to clean and maintain over time.

Saint-Gobain's robust glazing, gypsum wall and ceiling systems, acoustic panels, insulation, and specialised building materials helps create interiors that resist wear, stains, and everyday impact. Their long service life and low maintenance needs reduce operational disruptions and lifecycle costs — making them practical and efficient solutions for large campuses.

LIGHT CONSTRUCTION

Light Construction offers a smarter way to build educational spaces. It uses advanced materials and efficient construction methods that reduce disruption while enabling faster project completion, allowing campuses to expand or upgrade infrastructure within tight timelines.

With solutions from Saint-Gobain, educational buildings benefit from lighter structural loads, efficient resource use, and quicker installation. Applications such as high-performance glazing, lightweight plasterboards, gypsum plasters, drywall systems, insulation, modular partitions, and acoustic ceilings help create classrooms, libraries, and learning spaces that balance durability, functionality, and comfort. Writing boards from Saint-Gobain are a welcome addition to institutions embracing new-age, light and low VOC materials.

SUSTAINABLE CONSTRUCTION

Sustainability is increasingly central to educational infrastructure, with institutions focusing on reducing energy consumption, improving indoor environments, and ensuring responsible resource use.

Saint-Gobain's integrated solutions - including high-performance glazing, gypsum plasters, insulation, acoustic systems, and advanced material technologies - help create naturally lit, thermally balanced, and acoustically comfortable learning spaces. Construction chemical solutions further contribute by improving material efficiency, extending lifecycle performance, and reducing maintenance requirements.

Together, these solutions enable educational campuses that consume fewer resources, minimise environmental impact, and deliver efficient, future-ready learning environments.

DURABLE CONSTRUCTION

Educational environments are subject to continuous, high-intensity usage, with heavy footfall, frequent maintenance, and evolving functional requirements. Durability therefore becomes a key design consideration - ensuring materials can withstand impact, resist moisture, and maintain safety and performance over time.

Saint-Gobain's construction chemical solutions enhance structural strength and durability across varying climatic conditions, while high-performance flooring systems provide abrasion resistance, ease of maintenance, and long-term performance in high-traffic areas. Complementary systems such as impact-resistant glass and surface protection solutions further strengthen safety and usability.

The result is learning environments that are resilient, low-maintenance, and designed for consistent day-to-day performance, while supporting faster construction, optimised costs, and long-term operational efficiency.

05

MAKING GREEN, A WAY OF LIFE

Classrooms, laboratories, libraries, and common areas require consistent lighting, ventilation, solar and thermal comfort to support effective learning. Improving energy-efficiency is therefore essential not only to reduce operational costs, but also to create healthier learning environments.

Green building frameworks in India, such as the Indian Green Building Council (IGBC) and GRIHA, encourage schools and campuses to adopt sustainable design practices that reduce energy consumption, lower carbon emissions, and enhance indoor environmental quality.

Integrated solutions from Saint-Gobain, including high-performance glazing and advanced insulation, play a key role in achieving these goals. Solar control and low-emissivity glass help manage heat gain while allowing optimal natural daylight, creating bright learning spaces without glare or excessive heat. Complementing this, insulation solutions improve thermal comfort and reduce dependence on mechanical cooling.

BUILDING CODES AND REGULATORY LANDSCAPE

DESIGNING FOR COMPLIANCE AND DELIVERING HIGHER PERFORMANCE.

India's building codes define the critical requirements for safety, efficiency, and operational reliability in educational institutions. Saint-Gobain solutions are designed not only to meet these standards but to exceed them—helping educational institutions achieve enhanced energy efficiency, durability, safety, and performance stability for everyday operations.

7 out of 10 Green buildings in India use Saint-Gobain products.

LCAs/EPDs

All Saint-Gobain products and systems are supported by more than 3,000 Life Cycle Assessments (LCAs). The outcomes of these assessments, including Environmental Product Declarations (EPDs), are transparently published and independently verified by third parties.

Regulatory codes and green-rating frameworks establish baseline expectations for performance in educational institutions. Saint-Gobain solutions are **engineered to exceed** these requirements.

The National Building Code (NBC 2016) sets standards for fire safety, ventilation, daylight, and indoor environmental quality.

Saint-Gobain solutions exceed benchmarks

Through drywall assemblies, fire-rated glass systems, and fire curtains **tested from 30 minutes up to 240 minutes**

Acoustic Insulation with drywall systems, glass partitions, and window systems, achieving up to **80 dB reduction**

Low-VOC coatings and flooring systems support healthier indoor environmental conditions

Specialty acoustic ceilings and wall panels can achieve **reverberation time under 0.6 sec, and Auditorium RT < 0.8 sec**

Fire-resistant mortars and coatings **enhance passive fire protection** of critical structural elements

Non-combustible insulation exceeding the requirements of NBC Part 4

Vandal, attack, bullet, and blast-resistant glass systems for **protection against physical threats.**

Green frameworks such as **IGBC** and **GRIHA** assess daylight, IAQ, material impact, and acoustics.

Saint-Gobain solutions support stronger outcomes

Delivering **daylight factors above 2%**

Achieved NC 30-35 acoustic conditions

Lower embodied carbon with **certified, low-impact materials**: glass, plasterboard, and concrete admixtures

Specialty acoustic ceilings, glass partitions, drywall systems and wall panels help reduce background **noise levels < 35 dBA and reverberation time < 0.4 sec**

Insulated building envelope helps to maintain thermal comfort by **reducing heat load up to 80%**

Compressed insulation packaging **reduces site waste and logistics cost**

Over-deck insulation and waterproofing systems enhance thermal efficiency, contributing to **reduced energy consumption** within buildings.

Energy Conservation and Sustainable Building Code (ECSBC 2024) defines limits for thermal performance and solar heat gain.

Saint-Gobain drywall, glazing, insulation, construction chemicals, and window solutions outperform the code mandates

- Exterior drywall systems offering **30–40% better thermal efficiency**
- **U-values** as low as **0.20–1.6 W/m2K** **SHGC** values reaching **0.23**
- Reduced HVAC load with Insulation solutions with **R-value 25%** better than ECSBC 2024 requirements for improved occupant comfort
- Spray-applied insulation systems and high solar reflective coatings improve **building thermal performance** and reduce **energy consumption**

LEED further measures EUI and envelope performance

Saint-Gobain drywall, glazing, insulation, construction chemicals, and window solutions contribute to 8–12 LEED EA points by reducing HVAC loads and improving EUI

- **U-values 0.6 to 0.8 W/m2K** with exterior drywall system and **1.0-1.6 W/m2K & SHGC down to 0.23** with high-performance glazing
- High-efficiency insulation and verified disclosures such as **EPDs and low-VOC certifications**
- Help projects document performance gains across **Energy, IEQ, and Materials credits with greater reliability**
- Lower embodied carbon with **certified, low-impact materials**: glass, plasterboard, and concrete admixtures
- Credits In Material, Sustainability, and **IAQ – up to 20 Points**
- Low Thermal Conductivity and Recyclable materials **contribute to sustainable material credits**
- PU spray-applied foam insulation over roofs **(K-value ~0.028 W/m·K),** along with **high solar reflective coatings (SRI >100)** enhances **thermal efficiency** and supports improved **energy performance**

High-efficiency glazing, windows, hardware, insulation, drywalls, specialty ceilings & wall panels, gypsum plasters, fire and acoustic-rated systems, and construction chemicals collectively strengthen every dimension of multi comfort, enabling workplaces that deliver higher efficiency, enhanced occupant **comfort** and **wellbeing**, and **long-term performance** beyond mandated standards.

LIGHT & SUSTAINABLE SOLUTIONS FOR GREEN BUILDINGS

38 POINTS

HIGHEST CONTRIBUTION OF GREEN RATING POINTS

SAINT-GOBAIN | vetrotech SAINT-GOBAIN | gyproc SAINT-GOBAIN

FOSROC | chryso SAINT-GOBAIN | ecophon SAINT-GOBAIN

weber SAINT-GOBAIN | Rockinsul™ | Twigainsul®

NORTON SAINT-GOBAIN | ADFORS SAINT-GOBAIN | SolarGard SAINT-GOBAIN | CLIMAVER®

2 POINTS — PASSIVE ARCHITECTURE

HIGH PERFORMANCE GLASS |
FIRE RATED GLASS SYSTEMS |
HIGH SECURITY GLASS SYSTEMS

15 POINTS — ENERGY EFFICIENCY

HIGH PERFORMANCE GLASS |
FIRE RATED GLASS SYSTEMS |
HIGH SECURITY GLASS SYSTEMS |
THERMAL EFFICIENT DRYWALL & CEILING SYSTEM |
INSULATION

5 POINTS — GREENPRO CERTIFICATION

HIGH PERFORMANCE GLASS |
FIRE RATED GLASS SYSTEMS |
HIGH SECURITY GLASS SYSTEMS |
PLASTERBOARDS | PLASTERS |
SPECIALTY CEILINGS AND WALL PANELS |
INSULATION | CONSTRUCTION CHEMICALS

2 POINTS — RECYCLED CONTENT

HIGH PERFORMANCE GLASS |
LACQUERED GLASS | FIRE RATED GLASS SYSTEMS |
HIGH SECURITY GLASS SYSTEMS | PLASTERBOARDS |
SPECIALTY CEILINGS AND WALL PANELS |
INSULATION

2 POINTS — LOCAL MATERIALS

HIGH PERFORMANCE GLASS |
FIRE RATED GLASS SYSTEMS |
HIGH SECURITY GLASS SYSTEMS |
LACQUERED GLASS | PLASTERBOARDS |
PLASTERS | SPECIALTY CEILINGS AND WALL PANELS |
VALUE ADDED GYPSUM PLASTERS |
INSULATION | CONSTRUCTION CHEMICALS

1 POINT — HANDLING OF WASTE DURING CONSTRUCTION

HIGH PERFORMANCE GLASS | LACQUERED GLASS |
FIRE RATED GLASS SYSTEMS |
HIGH SECURITY GLASS SYSTEMS |
PLASTERBOARDS | PLASTERS |
SPECIALTY CEILINGS AND WALL PANELS | INSULATION

1 POINT — INNOVATION WITH LOW CARBON MATERIALS

LOW CARBON GLASS | LOW CARBON PLASTERBOARD |
LOW CARBON PLASTERS

3 POINTS — DAYLIGHTING & OUTDOOR VIEWS

HIGH PERFORMANCE GLASS |
FIRE RATED GLASS SYSTEMS |
HIGH SECURITY GLASS SYSTEMS

1 POINT — LOW EMITTING MATERIALS

HIGH-PERFORMANCE GLASS |
LACQUERED GLASS | PLASTERBOARDS |
PLASTERS | SPECIALTY CEILINGS AND WALL PANELS |
INSULATION | CONSTRUCTION CHEMICALS

1 POINT — OCCUPANT WELL BEING FACILITIES

HIGH PERFORMANCE GLASS | LACQUERED GLASS |
FIRE RATED GLASS SYSTEMS |
HIGH SECURITY GLASS SYSTEMS |
PLASTERBOARDS | PLASTERS |
SPECIALTY CEILINGS AND WALL PANELS | INSULATION

1 POINT — OPTIMIZATION IN STRUCTURAL DESIGN

HIGH PERFORMANCE GLASS | LACQUERED GLASS |
FIRE RATED GLASS SYSTEMS |
HIGH SECURITY GLASS SYSTEMS |
DRYWALLS | PLASTERS |
CONSTRUCTION CHEMICALS

1 POINT — WATER USE REDUCTION FOR CONSTRUCTION

DRYWALLS & CEILING SYSTEM |
PLASTERS |
CONSTRUCTION CHEMICALS

3 POINTS — EXEMPLARY PERFORMANCE

HIGH PERFORMANCE GLASS | LACQUERED GLASS |
FIRE RATED GLASS SYSTEMS |
HIGH SECURITY GLASS SYSTEMS |
PLASTERBOARDS | PLASTERS |
SPECIALTY CEILINGS AND WALL PANELS |
MOISTURE RESISTANT PLASTERS |
HIGH COVERAGE PLASTERS |
INSULATION | CONSTRUCTION CHEMICALS

THE BUILDING - A **360º** VIEW

SOLUTIONS FOR EVERY SURFACE AND SYSTEM

PRE-CONSTRUCTION

- Waterproofing Solutions
- Concrete Repair Systems
- Innovative Concrete Solutions
- Industrial Flooring Solutions
- Concrete Admixtures
- Joint Sealants
- Abrasive Wheels and Discs
- Surface Treatments
- Grouts
- Anchors

ENVELOPE

- High Security Glass Solutions
- Fire-rated Glass Solutions
- Electrochromic Glazing
- External Plasterboard
- uPVC Windows
- Sealants
- Tile Adhesives
- Railings
- Glass Cutting Wheels

INTERIORS

Decorative Gypsum Ceilings

Gypsum Plasters

Internal Tile Adhesives and Tile Grouts

Wall Coverings

Lacquered Glass

Mirrors

Privacy Glass

Acoustic Wall Panels

Shower Cubicles

Gyproc Habito Drywall with load bearing capacity

Gyproc Hydro Drywall with moisture & mold resistance

Gyproc Exterior Drywall with Glasroc X

Gyproc Gypsum Ceilings

Gyproc Drywall Quiet

Gyproc Gypsum Plaster with bonding agent

SOLUTION SNAPSHOT

FOUNDATION

Advanced waterproofing systems and construction chemical solutions provide critical protection against moisture ingress and subsoil exposure - ensuring long-term durability and structural stability of foundations in educational institutions. Polypropylene Geo Grid - Soil Stabilisation.

SUPERSTRUCTURE

Abrasives like - Cutting Wheels and Surface Finishing Discs for Metal, Wood, Concrete, Tile, and Wall, Sheets and Cloth Rolls, Core Bits, Drill Bits and Screw Bits, Additives, Cement Adhesives, Concrete Admixtures, Low Carbon Concrete, advanced concrete admixtures and low-carbon technologies improve density, reduce permeability, and enhance durability - supporting high-load structural performance and long-term reliability and contribute to the Structural Strengthening of educational institutions.

FACADES

High-performance Low Carbon Glass (also in jumbo sizes), Vetrotech high-security glass system solutions, Weatherproof Exterior Drywall using Glasroc X, and High Performance Façade sealants and Surface treatments combine to deliver durable, weather-resistant, physically secure and energy-efficient façades for reliable Educational Institutions' performance. Automatic Sliding Doors & Spider Fittings support façade performance and structural durability. Glass Wool and Stone Wool for Curtain Wall, Stone Wool for Fire and Smoke Seal Applications. Glass Fiber Mesh for Plaster crack prevention.

FLOORING

High-performance floor screeds, tile adhesives, industrial flooring systems, and waterproofing solutions provide level, durable, and moisture-resistant surfaces - designed to withstand heavy footfall, ensure slip safety, and enable easy maintenance in high-traffic areas such as classrooms, corridors, and common spaces. Glass Fiber Mesh for Screed Reinforcement.

ROOFING

Integrated roofing systems, including waterproofing membranes, protective coatings, sealants, shingles and insulation solutions, deliver weather-tight and thermally efficient performance - ensuring long-term protection against environmental exposure in large-span educational institutions. Glass Wool and Stone Wool insulation for underdeck/ overdeck applications.

SPECIALITY CEILINGS & WALL PANELS

Ecophon designer and acoustic ceilings for class rooms, reception area, auditoriums etc. Fade® One Acoustic Plaster; Ecophon® Solo Acoustic Free Hanging Panels; Perforated Gypsum Boards ; Metlance™ Metal Architectural Ceilings; Ecophon® Glasswool Acoustic Wall ceiling panels; SG Anutone® Strand® Woodwool/ Salon® wooden perforated acoustic Ceilings and Wall Panels offer indoor acoustic comfort and design. Gyproc Fire Rated Plasterboard ceiling upto 120mins fire rating.

INTERNAL WALLS & PARTITIONS

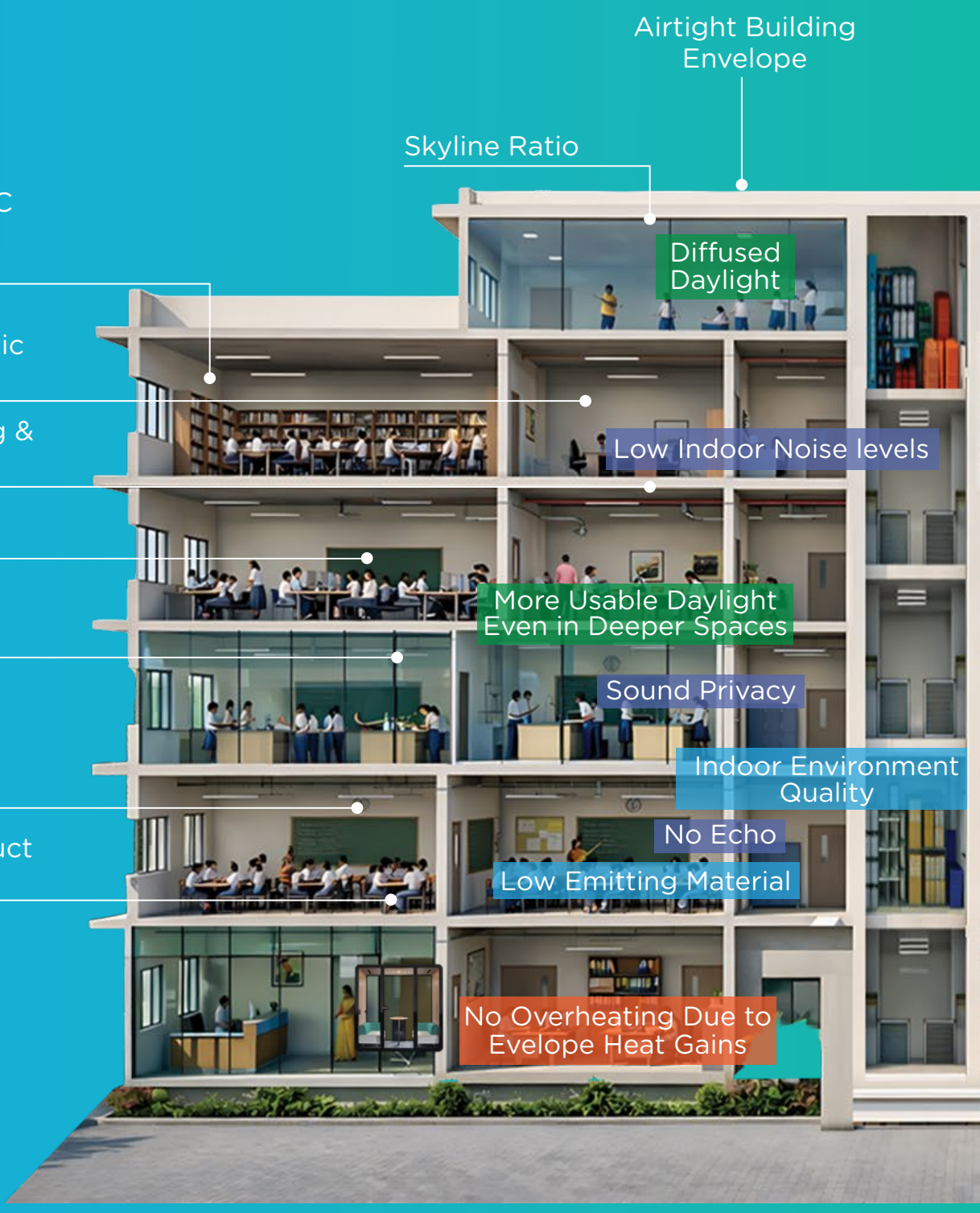
Gypsum Drywalls for Dry & Wet Areas, Glass Partitions, Automatic Sliding Doors and Lacquered Walls, Modular Acoustic Pods, Glassfibre Wallcoverings, Gypsum Plaster for Walls and Ceilings, CURTIVIA fire curtains and Vetrotech fire-rated glass system solutions, and Fire-rated Drywalls from Saint-Gobain Gyproc fortify the internal walls & partition systems of Educational Institutions. Acoustic window systems ensure noise control for focused environments. Shower enclosures ensure hygiene, durability, and moisture resistance. Sound and Fire Insulation for Drywall Partitions. Glass Fiber Dry Wall Tapes for Gypsum Board Joints. Glass Fiber Mesh for Plaster crack prevention.

VENTILATION

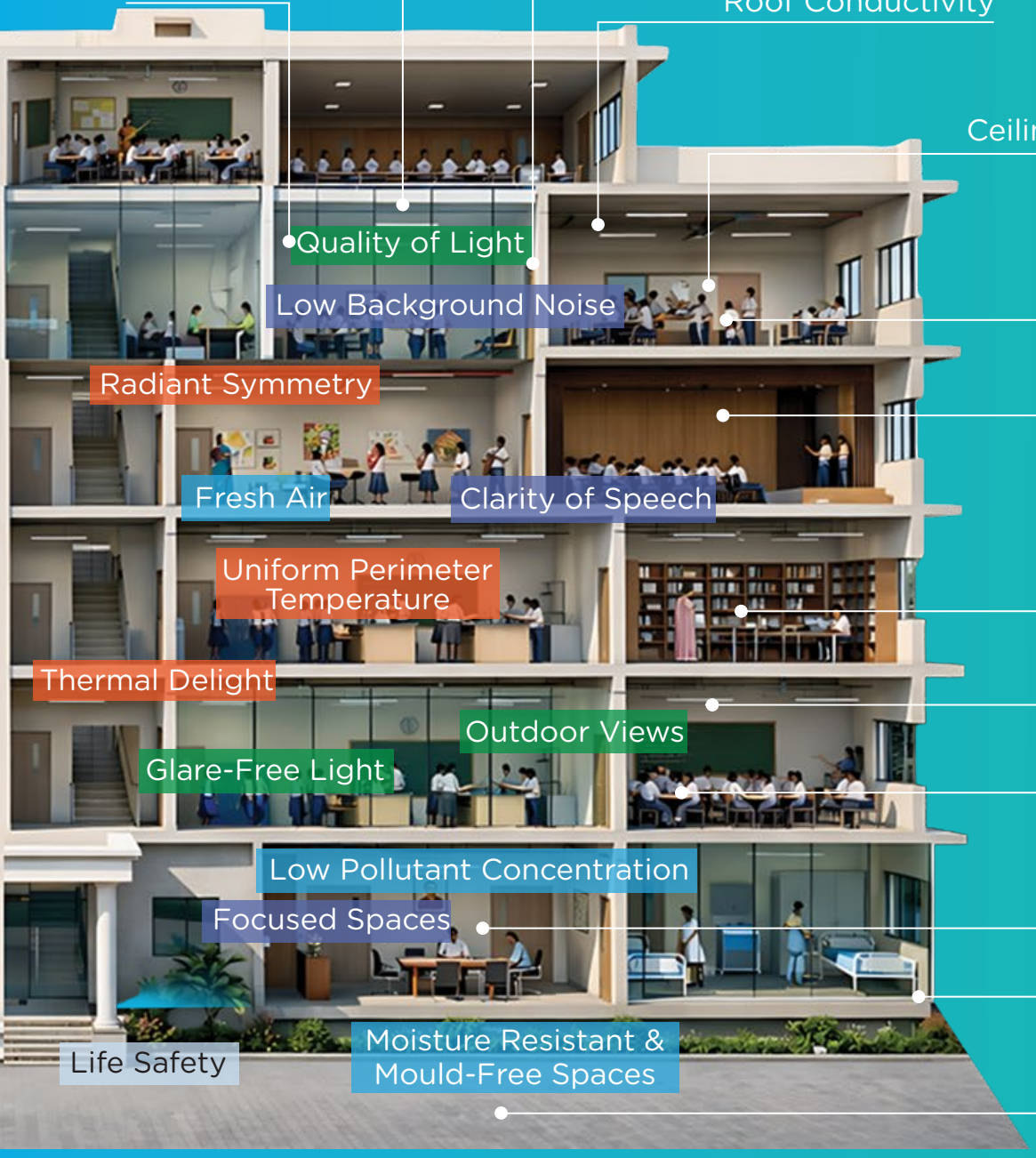
Saint-Gobain CLIMAVER® duct systems offer lightweight, airtight, pre-insulated ducts with excellent thermal and acoustic performance for efficient ventilation of Educational Institutions. For added safety, fire-rated duct solutions can be installed. In addition, Tekbond Fire Rated PU Foam and Tekbond High Performance PU Foam are recommended for sealing duct penetrations effectively. Glass Fiber Insect Screens in Doors & Windows. Glass Fiber Technical Textiles for Passive Fire Protection.

ENABLING MULTI COMFORT AND OCCUPANT WELLBEING

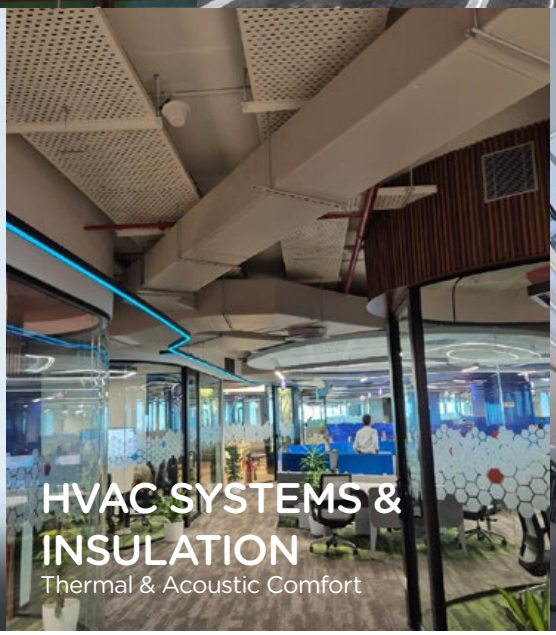
A space is a living environment that directly influences occupant multi comfort and wellbeing — a blend of Visual, Solar, Thermal, Acoustic, Indoor Air Quality and Safety. Explore Saint-Gobain solutions for multi-comfort.



- SOLAR/THERMAL COMFORT
- VISUAL COMFORT
- ACOUSTIC COMFORT
- INDOOR AIR QUALITY
- SAFETY



LIGHT AND SUSTAINABLE SOLUTIONS FROM SAINT-GOBAIN



COMPREHENSIVE PORTFOLIO OF CONSTRUCTION SOLUTIONS

- Clear Glass
- Tinted Glass
- Mirrors
- Solar Control Glass
- Thermal Insulation Glass
- Toughened Lacquered Glass
- Fire Safety Glass System Solutions
- Fire Curtains
- UPVC & Aluminium Doors/Shower Cubicles
- Electrochromic Glass
- Privacy Glass
- Railings
- Hardware, Partitions, Pods
- Wall Coverings
- High Security Glass System Solutions

SAINT-GOBAIN

Plaster Board Drywalls & Dry Lining Systems:

- Dry Area Applications
- Wet Area Applications
- Shaft walls
- Fire Rated Walls
- Acoustic Walls
- Exterior Walls
- Heavy Impact Walls

Ceiling System & Tiles

- Architectural Metal ceilings
- Ceiling Tiles & Board (Gypsum)

Gypsum Plasters

- Value Added Plasters
- High Coverage Plaster
- Moisture Resistant Plaster
- Internal Applications, Accessories

Metal Framing & Accessories

Jointing and Finishing Products

Gyproc Systems & Solutions

gyproc SAINT-GOBAIN

Acoustic Modular Ceiling

Acoustic Free Hanging Panels

Acoustic Wall Panels

Acoustic Plaster

ecophon SAINT-GOBAIN

Drywall Insulation

Façade Insulation

Underdeck Insulation

Flexible Duct

Pre-Formed Pipe Sections

Acoustic Panels

Twigainsul®

Drywall Insulation

Overdeck Insulation

Façade Insulation (Smoke Seal)

Rockinsul™

Pre-Insulated Duct System

CLIMAVER®

Sealants

Aerosols

Adhesives

Accessories

TEK BOND SAINT-GOBAIN

Waterproofing Systems (basement to roof)

Concrete Admixtures

Concrete Repair Systems

Protective Coatings

Industrial Flooring Solutions

Joint Sealants

Structural Adhesives

Cement Grinding Aids

Surface Treatments:

- Wide range of curing compounds
- Shutter release agents

Anchors:

- Chemical anchors for challenging construction needs

Grouts (cement and resin-based anchoring systems)

FOSROC

Concrete Solutions:

- Ready-Mix Concrete
- High Flow Concrete
- Low Carbon Concrete
- Integral Waterproofing
- Challenging Aggregate Solutions
- Self-Compacting Concrete (SCC)
- Underground Construction
- Curing Agents
- Precast (Wet/Dry)
- Demoulding Agents
- Lightweight Concrete

Cement Additives:

- Next Generation Activators
- Performance Activators
- Grinding Aids for Cement
- Masonry Additives
- Grinding Aids for Minerals

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Abrasive Solutions for Surface Preparation & Finishing

- Metal, Wood, Concrete Cutting and Wheels and Discs
- Wall and wood surface finishing discs, sheets and cloth rolls
- Core bits, Drill bits and screw bits

NORTON SAINT-GOBAIN

Tile & Stone Adhesives:

- Cementitious, Polymer Modified, Epoxy/PU Adhesives

Tile & Stone Grouts:

- Cementitious, Epoxy Grouts

Tile & Stone Care:

- Cleaners, Impregnators and Sealers

Waterproofing:

- Cementitious, primers, acrylic, Polyurethane waterproofing

Wall Construction Solutions:

- Adhesives for fixing AAC Blocks

weber SAINT-GOBAIN

WHY PARTNER WITH SAINT-GOBAIN?

Modern buildings demand solutions that minimise environmental impact while enhancing comfort, safety and efficiency.

Saint-Gobain delivers this through a sustainability-led innovation, manufacturing, and specification ecosystem. This is powered by continuous R&D tailored to hot and humid climates. As one of India's largest green, energy-efficient plant networks, Saint-Gobain provides end-to-end specification support and a fully digitalised approach that drives efficiency, accuracy, and low-carbon outcomes.

Continuous innovation is driven by the Saint-Gobain Research India (SGRI), where deep insights fuel advanced material science and rigorous application testing; powering **next-generation, science-backed solutions** for the built environment.

Regional manufacturing ensures consistent availability, reduced logistics emissions and reliable timelines. This is strengthened by Saint-Gobain Research India (SGRI), advanced digital tools and expert technical teams that convert science and innovation into better-performing buildings.

Expert-led advice from a specialised technological group - Design Core, delivers end-to-end specification support, reinforced by accurate modelling and compliance guidance for safe, sustainable designs.

01

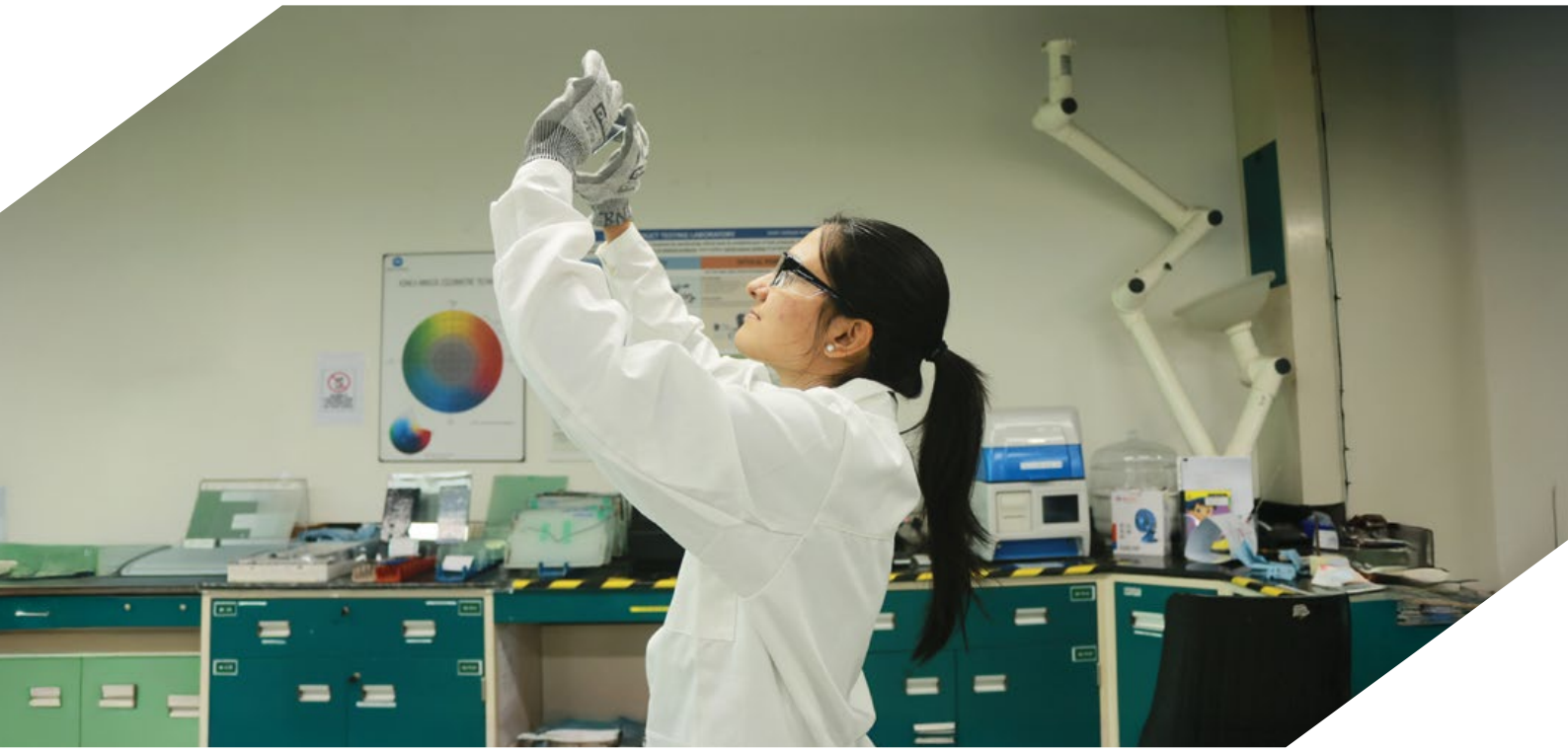
INSIGHTS > SCIENCE > SOLUTIONS
END-TO-END DELIVERANCE

INDIA'S EPICENTER FOR MAKING INSIGHTS A REALITY

Saint-Gobain Research India (SGRI) – India's largest private R&D centre for construction materials and solutions is located at **IIT-Madras Research Park**. SGRI brings together materials scientists, simulation experts and building physicists working on **thermal behaviour**, **acoustics**, **daylight**, **solar control**, **lifecycle impact** and **material safety**.

Insights from this research ecosystem feed directly into the design of **glass**, **insulation**, **gypsum systems**, **ceilings** and **construction chemicals**.

At SGRI, evidence becomes prototypes, **prototypes become validated assemblies**, and these lead to project specifications — ensuring every system not only meets regulatory thresholds but consistently exceeds them.



Lab testing for visual, solar, thermal, acoustic, fire etc.

Prototyping and pilot lines for Indian climatic conditions

Simulation-led development producing validated assemblies

25+ LABS | 200+ PRODUCT LAUNCHES | 250+ SCIENTISTS | 280+ PATENTS

1 OUT OF 4 PRODUCTS SOLD TODAY IN INDIA DID NOT EXIST 5 YEARS AGO

01A

FROM INSIGHTS TO MEASURABLE BUILDING PERFORMANCE

A comparative simulation of a Base Case vs. a Design Case using Saint-Gobain systems demonstrates the impact of material science on building outcomes.

ENVELOPE PERFORMANCE

- Walls improved from **0.695> 0.420** W/m²K glazing from **5.70>1.60** W/m²K
- SHGC reduced from **0.85> 0.22** W/m²K
- Cutting heat gain without compromising daylight

COMFORT PERFORMANCE

- Thermal comfort area increased **21%** Operative temperatures dropped **2°C**
- Glare reduced **34%** With **<2%** daylight variation
- Acoustic performance strengthened with **46%** STC improvement

CARBON, ENERGY & EFFICIENCY

- **17** million kg CO_2e reduction **12%** energy savings
- **34%** lower HVAC capacity **454** tonnes concrete and **21** tonnes steel savedy
- **27%** faster installation

The Design Case consistently surpasses compliance across thermal, solar, visual, acoustic and environmental metrics, delivering better comfort, lower energy demand, reduced embodied impact, faster construction and stronger lifecycle value.

WHY THIS MATTERS

01 Direct access to research-backed products and validated assemblies reduces specification risk.

02 Regional manufacturing shortens supply chains and improves predictability.

03 Solutions are developed with decarbonisation targets in mind, helping projects meet regulatory and voluntary sustainability goals.

02

MANUFACTURING EXCELLENCE: GREEN, REGIONAL AND RESPONSIBLE

Saint-Gobain's India operations are built on the principles of combining scale, sustainability and localisation.

GREEN MANUFACTURING FOOTPRINT

Saint-Gobain operates an extensive network of plants across India, strategically located to reduce transport emissions and ensure material availability for regional markets. These facilities integrate renewable energy, waste heat recovery, water circularity and advanced monitoring systems to minimise environmental impact. These initiatives have led to a **34% reduction** in **Scope 1** and **2 emissions** from earlier baselines, amplified by sustained investments in electrification, fuel switching and process optimisation.

LOCAL MATERIAL AVAILABILITY

Regional manufacturing ensures that high-performance glass, specialty ceiling tile, insulation, construction chemicals, waterproofing systems, gypsum boards and adhesives are available consistently across the country. This reduces lead times, stabilises project schedules and limits the carbon footprint associated with long-distance logistics.

SUSTAINABLE MANUFACTURING PRACTICES

Across plants, waste reduction and circularity principles drive production. Glass cullet is recycled back into the float process; gypsum waste is reintroduced into plasterboard manufacturing; rainwater and treated wastewater increase water circularity.

WHY THIS MATTERS

01 Sustainable, regionally distributed manufacturing lowers embodied impacts while ensuring predictable supply.

02 This translates to reduced logistics emissions, consistent quality and dependable timelines, strengthening project certainty and supporting green-building objectives.

03 In large projects with compressed timelines, this alignment between production and proximity becomes a decisive advantage. Saint-Gobain's integrated model strengthens the sustainability credentials of every delivered product.

03

DIGITAL TOOLS FOR PERFORMANCE DRIVEN DESIGN

Saint-Gobain's digital layer accelerates decision-making and reduces design risk. The company provides simulation and specification tools—Calumen/Calumen Live for glazing and performance evaluation is available to design teams for comparative glazing selection and performance modelling.

Calumen supports multi-parameter tradeoffs (U-value, SHGC, VLT, acoustic inputs) and produces outputs suitable for early design and final specification. Saint-Gobain also provides Tech Calc, a versatile engineering and technical calculation tool that simplifies complex mathematical and performance computations.

Tech Calc supports built-in thermal and energy-saving calculations for insulation systems, enabling accurate assessment of material efficiency. The platform automates complex formulas into clear, simplified outputs, reducing manual effort and improving reliability.

Beyond tools, Saint-Gobain offers BIM-ready content and technical integration pathways: from BIM objects to visualisers and specification packages. The firm's BIM capability has been developed over years to deliver interoperable models and data for use in collaborative project environments.

WHY THIS MATTERS

01 Rapid glazing and envelope comparisons with project-specific data (via Calumen) reduce iteration time.

02 Built-in performance calculations with technical validation.

03 BIM objects and digital specs simplify handover and integration into design workflows.

04 Expert simulations (daylight, thermal, acoustic, wind) de-risk design choices and speed approvals.

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DESIGN CORE: EXPERT-LED TECHNICAL AND SPECIFICATION SUPPORT

Design Core is a specialised technical group that works with architects, façade consultants, acoustic consultants and developers to refine design intent and specification.

The team supports:

1. Daylight & glare analysis
2. Thermal performance and thickness optimisation
3. Wind load checks for façades
4. System Testing, BIM-Revit Modeling/ Families
5. Acoustic modelling for partitions and ceilings
6. Fire and code compliance guidance
7. Concrete Technology (CT) Support

Inputs from Design Core allow projects to validate decisions early, ensure compliance with NBC, ECBC and green frameworks, and document data for IGBC, GRIHA and LEED evidence packages.

DIGITAL ASSURANCE ACROSS THE LIFECYCLE

From concept modelling to final specification and site validation, digitalisation ensures that performance assumptions are not lost through the construction process.

The integration of BIM, software tools, analytics and on-ground technical support creates continuity from design to delivery.

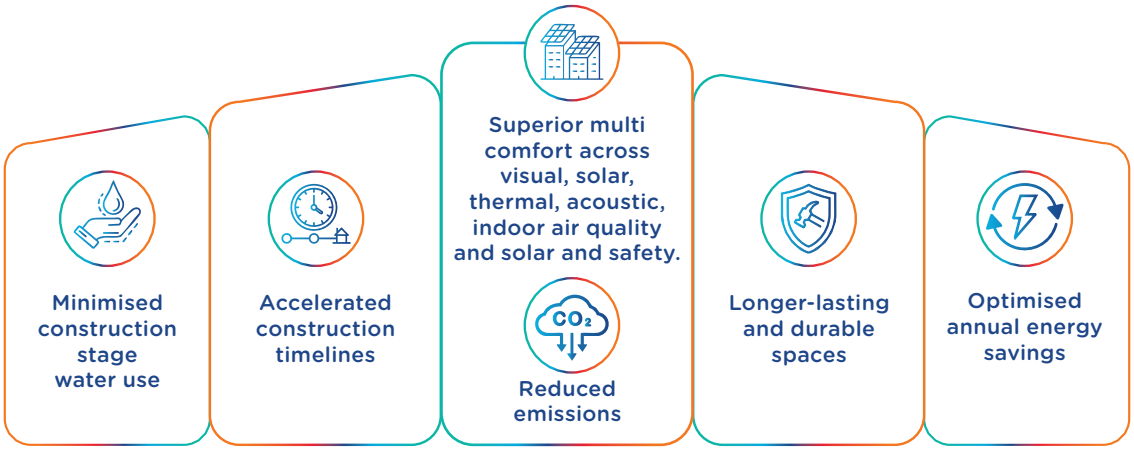
WHY THIS MATTERS

01 Early-stage concept modelling (daylight, thermal, acoustic).

02 Advanced simulation, reliable manufacturing and precise specification support give projects a partner that understands performance not as a claim but as a measurable, science-backed outcome — helping create offices that are efficient, comfortable and ready for the future.

MULTI COMFORT AND OCCUPANT WELLBEING, DELIVERED IN A LIGHT AND SUSTAINABLE WAY.

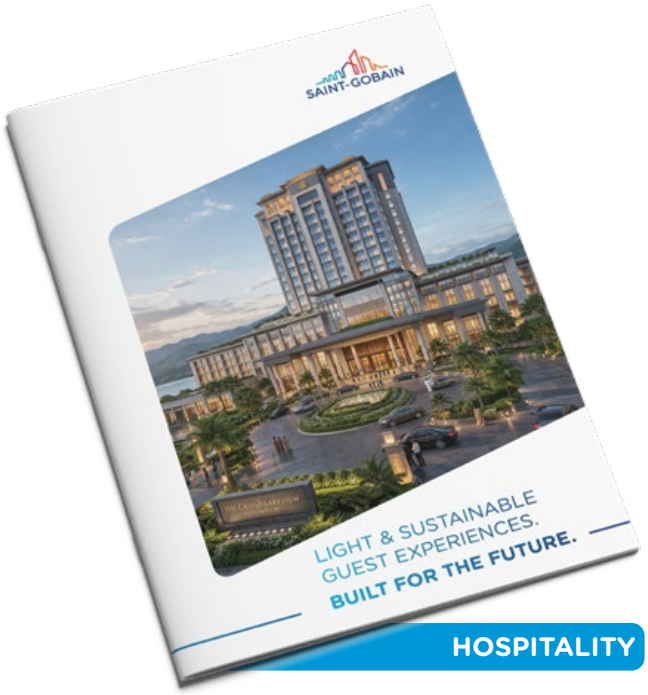
Saint-Gobain's light and sustainable construction systems deliver tangible value across the entire building lifecycle — reducing impact, enhancing comfort and improving performance where it matters most.



A smarter way to build — lighter on resources, stronger in performance and ready for the future.

Saint-Gobain: Delivering multi comfort and occupant well-being in a light and sustainable way.

EXPLORE OUR OFFERINGS ACROSS OTHER SEGMENTS:



TOGETHER, MAKING THE WORLD A BETTER HOME

Saint-Gobain
India Private Limited

5th Level, Leela Business Park,
Andheri - Kurla Road,
Vijay Nagar Colony West, Marol,
Andheri East, Mumbai,
Maharashtra – 400059, India.

http://www.saint-gobain.co.in