



LIGHT & SUSTAINABLE
DATA CENTERS.

BUILT FOR THE FUTURE.



POWERING THE WORLD OF DATA WITH LIGHT AND SUSTAINABLE SOLUTIONS



Data centers are constantly on the rise, and increasingly having to meet the demands of a digital-first world and growing data consumption. With the growing need for performance, reliability, and scalability, developers and designers today have the opportunity to create facilities that ensure **operational resilience**, while **being efficient, sustainable, and high-performing**.



THE NEEDS OF DATA CENTERS



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

01

Safety

High-performance materials and systems must support fire safety, structural integrity, and operational reliability - ensuring protection of assets, personnel, and continuous uptime.



02

Efficient Construction

Data center construction must enable fast, modular, and scalable execution to meet evolving capacity demands, while optimising capital investment and ensuring long-term operational efficiency.



03

Energy-efficiency

Data centers mandate thermal insulation and solar control, in order to reduce cooling loads and optimise energy consumption in 24/7 environments.



04

Acoustics and Ventilation

The closeted nature of data centers, coupled with whirring noise makes it important for better acoustics and ventilation management.



05

Contamination Management

Effective waterproofing and moisture control systems are critical to prevent moisture ingress and environmental risks, protecting sensitive equipment and ensuring long-term reliability of data center operations.



The future of data center design lies in achieving a harmony of safety, energy-efficiency, acoustics, ventilation, and contamination management while adhering to **light and sustainable construction**.

01

SECURING
MISSION-CRITICAL
ENVIRONMENTS
WITH ADVANCED
SOLUTIONS





▶ Data centers house mission-critical infrastructure that demands the highest levels of fire protection and reliability. Building materials used in these facilities must ensure effective fire containment, limit smoke spread, and safeguard both people and sensitive equipment to maintain operational continuity.



▶ A combination of Saint-Gobain's fire-rated - glazing, curtains, and plasterboard systems enables robust compartmentalisation — containing fire and smoke within defined zones while maintaining visibility where required. These solutions enhance structural fire resistance, protect critical assets, and ensure that data center environments remain safe, compliant, and resilient under fire scenarios.

02

CREATING
DYNAMIC SYSTEMS
THAT KEEP
PACE WITH
CHANGING TIMES



Data Center construction must keep pace with rapidly growing technology requirements, calling for solutions that are resource-efficient, quick to deploy, and scalable for future expansion. These facilities operate under strict timelines, making speed of construction and minimal disruption critical, especially for capacity additions and upgrades.

The use of modular systems and high-performance materials enables faster installation, enhanced quality control, and the flexibility to scale infrastructure as needs grow. These approaches also help reduce operational costs, optimise energy performance, and ensure long-term reliability — reinforcing the need for data centers that are efficient, resilient, and built for continuous performance.



LIGHT CONSTRUCTION

Light Construction offers a smarter way to build data center facilities — using advanced materials and efficient construction methods.

With solutions from Saint-Gobain, projects benefit from lighter structural loads, efficient resource use, lesser water consumption, reduced waste and quicker installation. Applications such as high-performance glazing, lightweight plasterboards, gypsum plasters, drywall systems, insulation, specialised partitions, hardware and acoustic ceiling systems help create controlled, secure environments that support sensitive equipment and continuous operations.

The result is infrastructure designed to enable data centers to perform reliably while allowing for future expansion and technological upgrades.



SUSTAINABLE CONSTRUCTION

Sustainability is becoming increasingly important in data center design as operators seek to manage high energy demands while maintaining operational reliability and environmental responsibility.

A combination of high-performance glazing, insulation, gypsum wall systems, gypsum plasters and specialised construction materials help support controlled indoor conditions, improve solar & thermal efficiency, and optimise energy use within facilities. These solutions contribute to stable operating environments for sensitive equipment while helping reduce overall energy consumption and operational costs.



DURABLE CONSTRUCTION

Data centers operate under mission-critical conditions where uptime, reliability, and performance are non-negotiable. Infrastructure must withstand continuous operations, heavy equipment loads, stringent maintenance cycles, and controlled thermal and humidity environments. Durability is therefore essential - ensuring materials resist wear, control moisture ingress, and maintain structural and functional integrity over time.

Saint-Gobain's construction chemical solutions are engineered to meet these demands by enhancing structural strength, reducing permeability, and supporting long-term durability across varying climatic conditions. High-performance anti-static (ESD) flooring systems with high abrasion and scratch resistance ensure safe operation of sensitive equipment while enabling low-maintenance performance. Advanced waterproofing systems protect against moisture ingress, preventing corrosion and system failures.



Together, these integrated solutions enable data center infrastructure that is resilient, energy-efficient, and built for continuous, uninterrupted performance.

03

OPTIMISING ENERGY PERFORMANCE FOR 24/7 OPERATIONAL ENVIRONMENTS





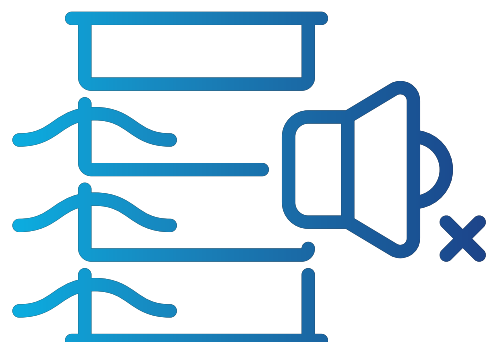
▶ Data centers operate 24/7 and are highly energy-intensive, making solar performance a key priority. High-performance glazing with superior insulation and solar control properties reduces unwanted heat gain, supports stable internal temperatures, and lowers the burden on HVAC and cooling systems.



▶ By optimising building envelope performance, advanced insulation solutions contribute to improved energy-efficiency and reduced operational costs. In addition, insulation and surface protection systems contribute to thermal stability, reducing energy loads and supporting efficient cooling strategies.

04

CONTROLLING AIRFLOW AND ENSURING ACOUSTIC COMFORT





Data centers house high-density equipment, cooling systems, and backup infrastructure that generate continuous noise. Effective acoustic solutions help reduce noise levels, creating safer and more comfortable conditions for maintenance personnel. They also prevent sound transmission to adjacent areas, which is especially important in mixed-use facilities or urban locations.



Efficient ventilation is essential to manage heat loads generated by servers and equipment. Proper airflow design ensures consistent temperature control, prevents hotspots, and enhances equipment reliability and lifespan.



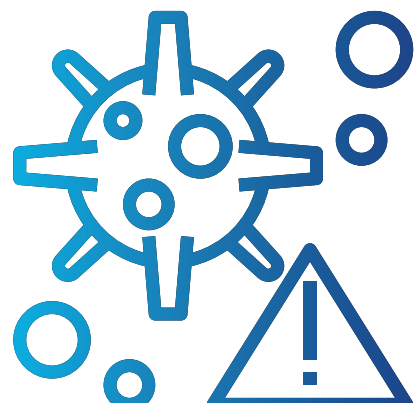
Gyproc drywall systems, acoustic ceiling tiles, Ecophon panels, glass partitions with hardware deliver superior sound absorption and insulation—critical for managing equipment noise and improving overall acoustic comfort within technical spaces. For ventilation and thermal efficiency, Saint-Gobain's insulation solutions play a vital role in HVAC systems.



These materials enable efficient airflow management, maintain thermal stability, and support energy-efficient cooling—while also contributing to acoustic dampening and fire safety.

05

PROTECTING ASSETS WITH FOOL-PROOF SYSTEMS





▶ Effective waterproofing in data centers is critical to protect sensitive equipment and infrastructure from moisture ingress, which can lead to corrosion, electrical failures, and costly downtime. Beyond water, controlling the ingress of vapor, dust, and gases is equally important to maintain clean, controlled environments that ensure uninterrupted operations and long-term reliability.



▶ Saint-Gobain waterproofing solutions come in handy effectively for contamination management in data centers. These solutions help create a tightly sealed, contamination-resistant envelope that enhances durability, protects assets, and supports optimal data center performance.

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 data center environments. Saint-Gobain solutions are designed not only to meet these standards but to exceed them—helping data centers achieve enhanced energy efficiency, durability, safety, and performance stability for mission-critical 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 modern offices. 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**



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



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 DRY WALL & 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 360° 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

Privacy Glass

Acoustic Wall Panels

Gyproc Habito
Drywall with load
bearing capacity

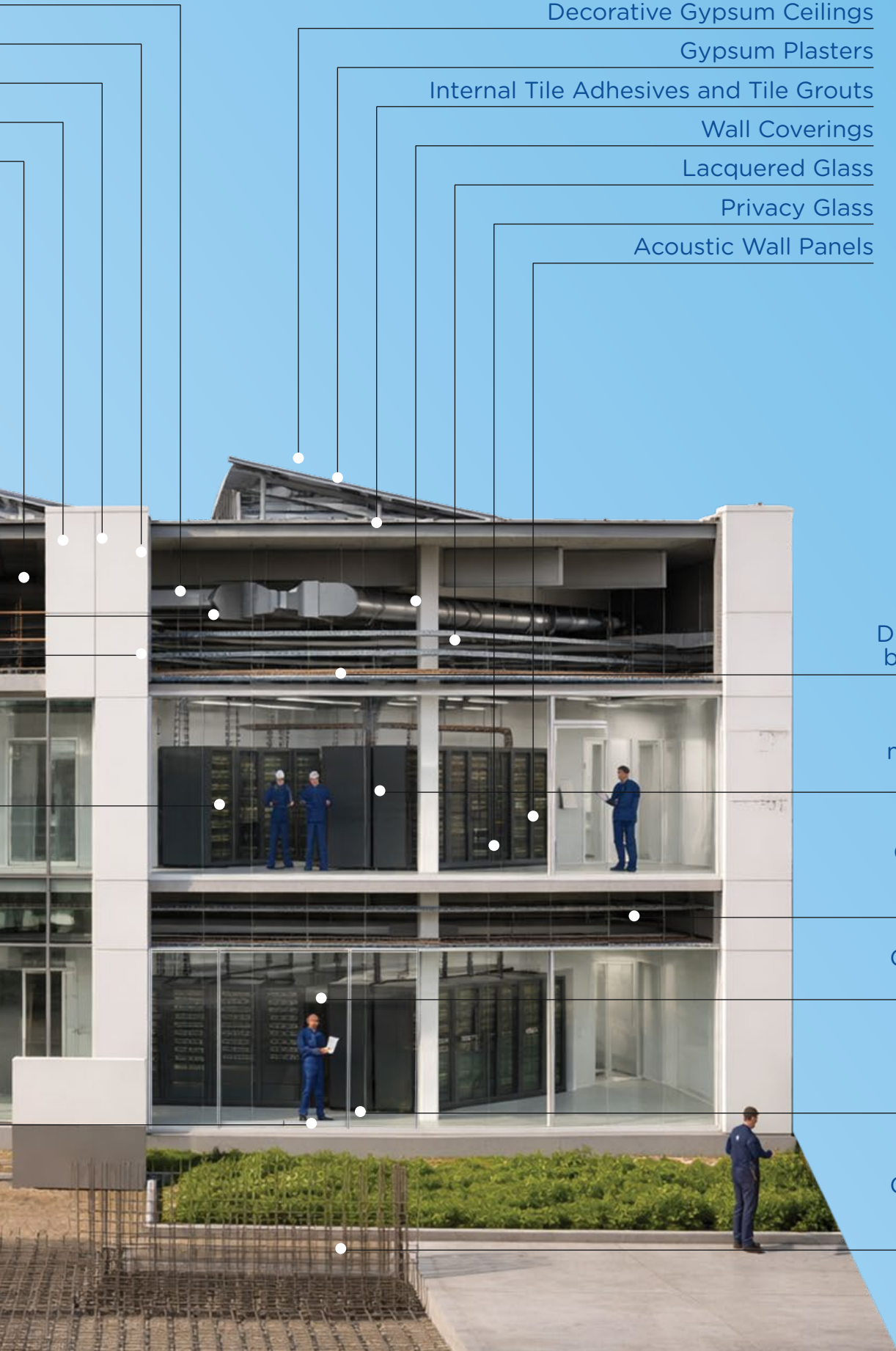
Gyproc Hydro
Drywall with
moisture & mold
resistance

Gyproc Exterior
Drywall with
Glasroc X

Gyproc Gypsum
Ceilings

Gyproc Drywall
Quiet

Gyproc Gypsum
Plaster with
bonding agent





SOLUTION SNAPSHOT



FOUNDATION

High-performance waterproofing membranes and integral waterproofing systems provide zero-failure protection against water ingress - safeguarding critical infrastructure and ensuring long-term durability of basements and foundation in Data Centers.



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 Data Centers.



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 Data Centers' performance. Automatic Sliding Doors systems and Spider Fittings support façade performance and structural durability. Glass Wool and Stone Wool for Curtain Wall, Stone Wool for Fire and Smoke Seal Applications.



FLOORING

Specialised anti-static (ESD) flooring systems provide controlled electrostatic discharge, high load-bearing capacity, and superior abrasion and scratch resistance - ensuring protection of sensitive equipment and low-maintenance, long-life performance.



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 data centers. Glass Wool and Stone Wool insulation for underdeck/ overdeck applications.



SPECIALITY CEILINGS & WALL PANELS

Ecophon® acoustic ceilings for data centers. 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.



INTERNAL WALLS & PARTITIONS

Gypsum Drywalls & Partitions for Dry & Wet Areas, Glass Partitions, Automatic Sliding Doors and Toughened Lacquered Glass Wall Panelling, Modular Acoustic Pods, Glassfibre Wallcoverings, Gypsum Plaster for walls and ceilings, CURTIVIA fire curtains and Vetrotech fire-rated glass system solutions, and Fire-rated Plasterboards from Saint-Gobain Gyproc fortify the internal walls & partition systems of Data Centers. Acoustic window systems ensure noise control for focused environments. Drywall partitions that provide Sound and Fire Insulation.



VENTILATION

Saint-Gobain CLIMAVER® duct systems offer lightweight, airtight, pre-insulated ducts with excellent thermal and acoustic performance for efficient ventilation of Data Centers. 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.

Optimized SHGC Glass for Lesser Heat & Nil Glare

Superior Acoustic Drywall

Interior Planning & Spatial Layouts

No VOCs

Window Ratio, Location & Size

Low Thermal Conductivity of wall to Minimize Heat Gains

Pre-Insulated Duct System

Skyline Ratio

Airtight Building Envelope

Diffused Daylight

Low Indoor Noise levels

More Usable Daylight Even in Deeper Spaces

Sound Privacy

Indoor Environment Quality

No Echo

Low Emitting Material

No Overheating Due to Evelope Heat Gains



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



Sound Insulated Glass

Smart Glass as per Sun's Movement

From Internal & External Sound Sources

Reflective & Optimized Roof Conductivity

Quality of Light

Low Background Noise

Radiant Symmetry

Fresh Air

Clarity of Speech

Uniform Perimeter Temperature

Thermal Delight

Glare-Free Light

Outdoor Views

Low Pollutant Concentration

Focused Spaces

Life Safety

Moisture Resistant & Mould-Free Spaces

Sound Absorbing Ceilings and Wall Panels

Electrical Lighting Placement & Intensity

Glass with Optimised U-Value

Orientation & Mutual Shading

Thermal efficient Exterior wall

Long Term Sensor Based Monitoring

Air Filtration

Fire Curtains

Fire Rated and High Security Glass System Solutions

LIGHT AND
SUSTAINABLE
SOLUTIONS
FROM
SAINT-GOBAIN





GLASS FOR FACADES

Aesthetics | Energy Efficient | Light Build



DRYWALL & SPECIALTY CEILINGS

Light Weight | Acoustic Comfort



GLASS FOR INTERIORS

Aesthetics | NIL VOCs | Light Build | Life Safety



HVAC SYSTEMS & INSULATION

Thermal & Acoustic Comfort



PLASTERS & CONSTRUCTION CHEMICALS

Lower Resources
Alternate to Sand Cement
Reduced Water Consumption

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

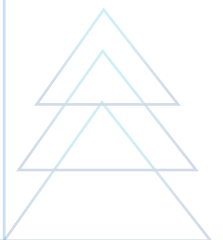
Privacy Glass

Railings

Hardware, Partitions, Pods

Wall Coverings

High Security Glass System Solutions



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



Acoustic Modular Ceiling

Acoustic Free Hanging Panels

Acoustic Wall Panels

Acoustic Plaster



Drywall Insulation

Façade Insulation

Underdeck Insulation

Flexible Duct

Pre-Formed Pipe Sections

Acoustic Panels



Drywall Insulation

Overdeck Insulation

Façade Insulation (Smoke Seal)



Pre-Insulated Duct System



Sealants

Aerosols

Adhesives

Accessories



**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

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

chryso
SAINT-GOBAIN

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

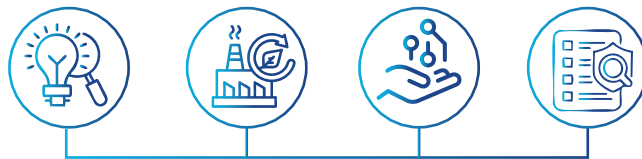
WHY
PARTNER
WITH
SAINT-GOBAIN?





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**

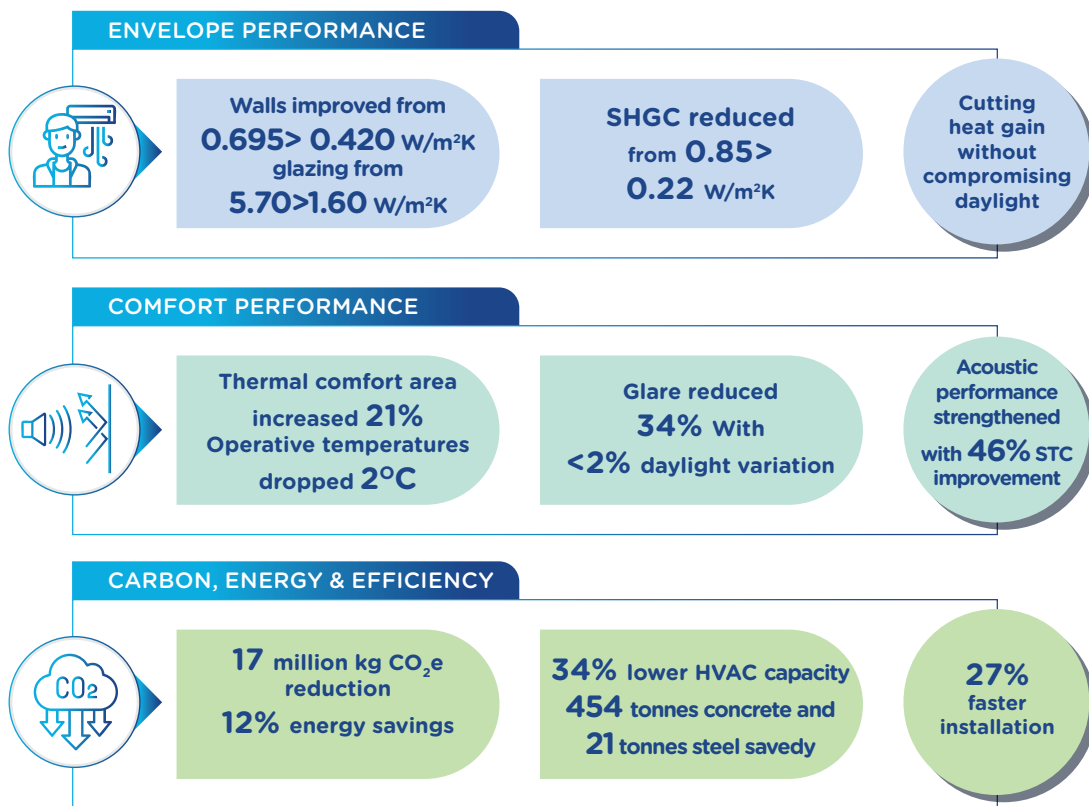
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FROM INSIGHTS
TO MEASURABLE
BUILDING PERFORMANCE





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



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.

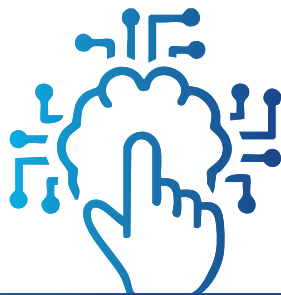
WHY THIS MATTERS



- 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

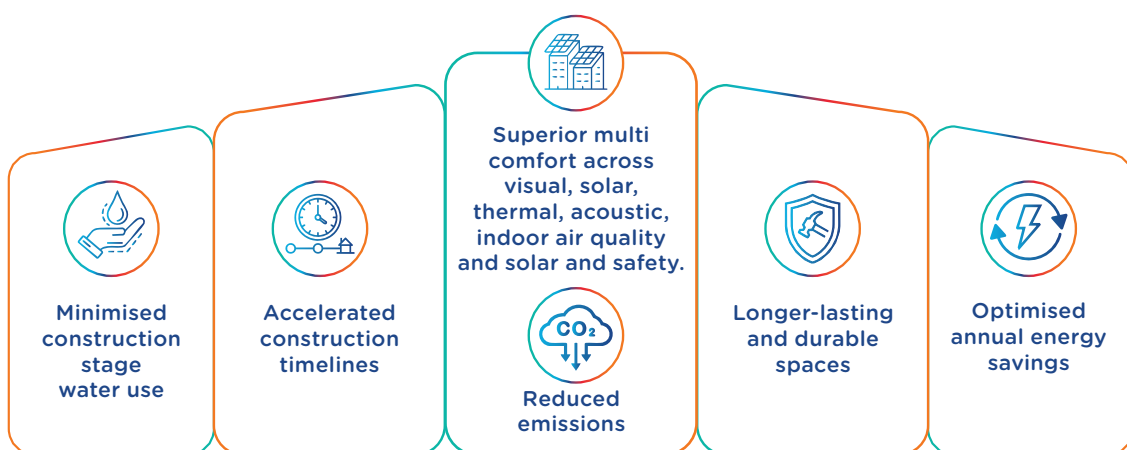
- 01 Early-stage concept modelling (daylight, thermal, acoustic).
- 02 Advanced simulation, reliable manufacturing and precise specification support give projects a partner that understands performance not as a claim but as a measurable, science-backed outcome — helping create offices that are efficient, comfortable and ready for the future.





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

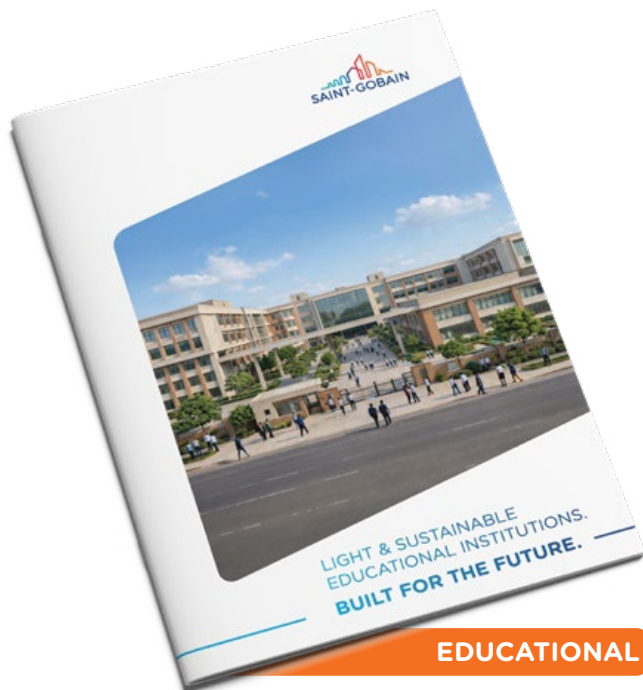
Saint-Gobain's light and sustainable construction systems deliver tangible value across the entire building lifecycle — reducing impact, enhancing comfort and improving performance where it matters most.



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



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