SILICA WHITE

SILICA JAPAN INC.

Company Profile

SILICA JAPAN INC. is a Japanese manufacturer and technology-driven company specializing in advanced construction materials and high-performance cement admixture solutions. Through continuous innovation, strict quality control, and a commitment to sustainability, the company develops products that significantly enhance the strength, durability, and long-term performance of concrete structures.

Leveraging Japan's renowned engineering expertise and manufacturing excellence, SILICA JAPAN INC. supplies premium construction additives designed to meet the demanding requirements of modern infrastructure, commercial developments, industrial facilities, and large-scale civil engineering projects

Company History

The development of SILICA JAPAN's innovative technology is based on decades of research and testing of natural volcanic glass materials.

Key Milestones

- **1985** – Research and development initiated.
- **1989** – Comprehensive material testing program commenced.
- **1990** – Commercial application and use began in Japan.

The company's core technology utilizes naturally occurring volcanic glass deposits that are carefully processed into an ultra-fine micro-powder through advanced drying, grinding, and manufacturing techniques.

Today, SILICA JAPAN's volcanic glass micro-powder is recognized as the world's first product of its kind to be registered under Japanese Industrial Standards (JIS).

Advanced Manufacturing Technology

Natural volcanic glass ore is:

1. Carefully selected from premium deposits.
2. Dried using specialized kiln technology.
3. Finely ground and processed into an ultra-fine powder.
4. Manufactured under stringent Japanese quality control standards.

Main Chemical Composition

- **SiO_2 (Silicon Dioxide)**
- **Al_2O_3 (Aluminum Oxide)　　Total：88.66%**

Required components of pozzolan according to ASTM standards: Total content of SiO_2, Al_2O_3 and Fe_2O_3 of 70% or more.　（Pozzolanic reaction）

The material complies with relevant ASTM standards and is engineered to improve the performance characteristics of concrete and cementitious systems.

Volcanic glass micropowder

SILICA WHITE

Premium Cement Admixture for High-Performance Concrete

SILICA WHITE is SILICA JAPAN INC.'s flagship cement admixture, manufactured in Japan using advanced production technology and rigorous quality assurance procedures.

Developed from natural volcanic glass micro-powder, SILICA WHITE® enhances concrete performance, durability, and sustainability, making it an ideal solution for major infrastructure and mega construction projects.

Key Benefits

Superior Strength Development

- Waterproof properties come into play, preventing water from seeping in.
- Improves long-term structural performance.
- Concrete that is continuously supplied with water develops self-healing properties in its cracks.

Enhanced Durability

- Reduces permeability and water penetration.
- Increases resistance to environmental deterioration.

Improved Workability

- Provides better concrete handling and placement.
- Enhances finishing quality and surface appearance.

Long-Term Protection

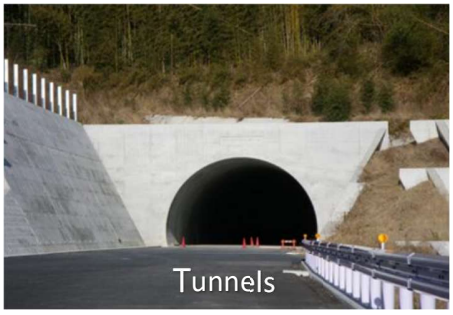
- Improves resistance against weathering and harsh exposure conditions.
- Extends the service life of concrete structures.

Sustainable Construction

- Supports environmentally responsible construction practices.
- Contributes to durable and resource-efficient infrastructure.

Applications

SILICA WHITE is widely used in:


Tunnels

Infrastructure Projects

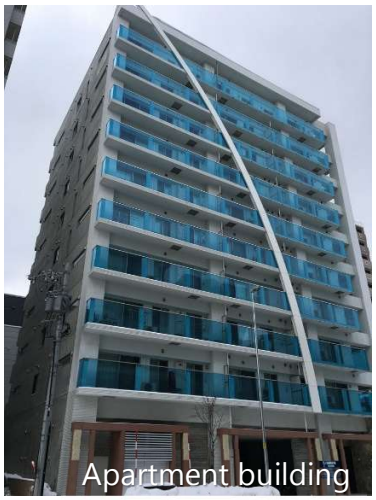
- Roads and highways
- Bridges and flyovers
- Tunnels
- Airports
- Dams and hydropower projects
- Water supply and treatment facilities
- Fishing port facilities
- Paving works


Museum


Box culvert

Building Construction

- High-rise buildings
- Commercial complexes
- Industrial facilities
- Factory floor slabs
- Waterproof concrete structures


Apartment building

- Swimming pools

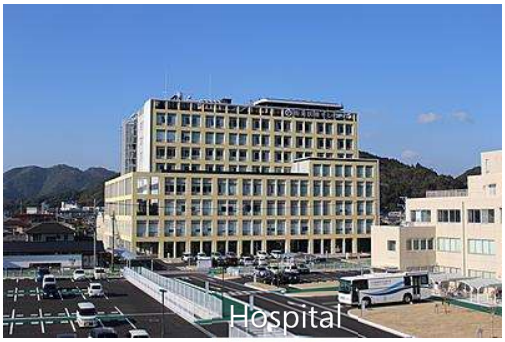
Precast and Specialized Concrete


School building

- Precast concrete products
- Structural concrete elements
- Government infrastructure projects
- Mega construction developments

Proven Construction Applications

SILICA WHITE has been successfully utilized in:


Hospital

- Buildings
- Bridges
- Tunnels
- Factory slabs
- Water supply facilities
- Waterproof structures
- Swimming pools
- Fishing port facilities
- Pavement construction
- Precast concrete manufacturing


City Hall

Commitment to Quality

SILICA JAPAN INC. adheres to rigorous Japanese manufacturing standards and continuously invests in research and development to ensure exceptional product consistency, reliability, and performance.

The company works closely with contractors, consultants, engineers, project owners, and government agencies to deliver advanced construction material solutions that contribute to stronger, safer, and more sustainable infrastructure.

Vision

To become a globally trusted leader in advanced construction material technologies by delivering innovative, high-quality, and environmentally responsible solutions for the infrastructure and building sectors.

Mission

- To provide world-class cement admixture technologies.
- To support sustainable and durable construction practices.
- To deliver consistent product quality and technical excellence.
- To contribute to the successful completion of infrastructure and mega projects worldwide.

Why Choose SILICA JAPAN INC.

✓ Japanese technology and manufacturing excellence

✓ JIS-Compatible products volcanic glass micro-powder technology

✓ Proven performance in infrastructure and mega projects

✓ Enhanced concrete strength and durability

✓ Long-term lifecycle cost reduction

✓ Commitment to quality, innovation, and sustainability

Contact Information

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Construction Examples | Silica Japan inc

President

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Building Stronger Infrastructure Through Japanese Innovation

SILICA JAPAN INC. continues to advance the global construction industry through innovative material technology, engineering excellence, and premium cement admixture solutions that help build stronger, safer, and more sustainable structures for future generations.