SUBER-TUBE SOLAR TUBE

A Strategic Investment in Efficiency,
Sustainability, and Performance.

The Strategic Imperative for Modern Facilities

Modern commercial and industrial facilities face the dual pressures of escalating energy costs and a growing corporate responsibility to foster sustainable and productive environments.

In large-scale facilities—warehouses, industrial centers, and shopping malls—conventional electric lighting is a primary driver of high operational expenditures and a substantial environmental footprint.

This challenge presents a clear and urgent opportunity for an innovative solution that addresses these economic and environmental pressures simultaneously, creating value across the enterprise.

The Solution: A High-Performance Natural Lighting System

The SUBER-TUBE SOLAR TUBE system is an innovative technology engineered to harness natural sunlight and illuminate interior spaces with remarkable efficiency. It serves as an economical and environmentally friendly alternative to traditional electricity consumption for lighting, directly targeting a major operational cost center.

Superior Lighting Capacity

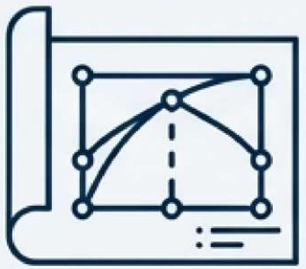
Illuminates more effectively than a conventional window.

Zero Maintenance

A completely hermetic and water-resistant design.

Proven Durability

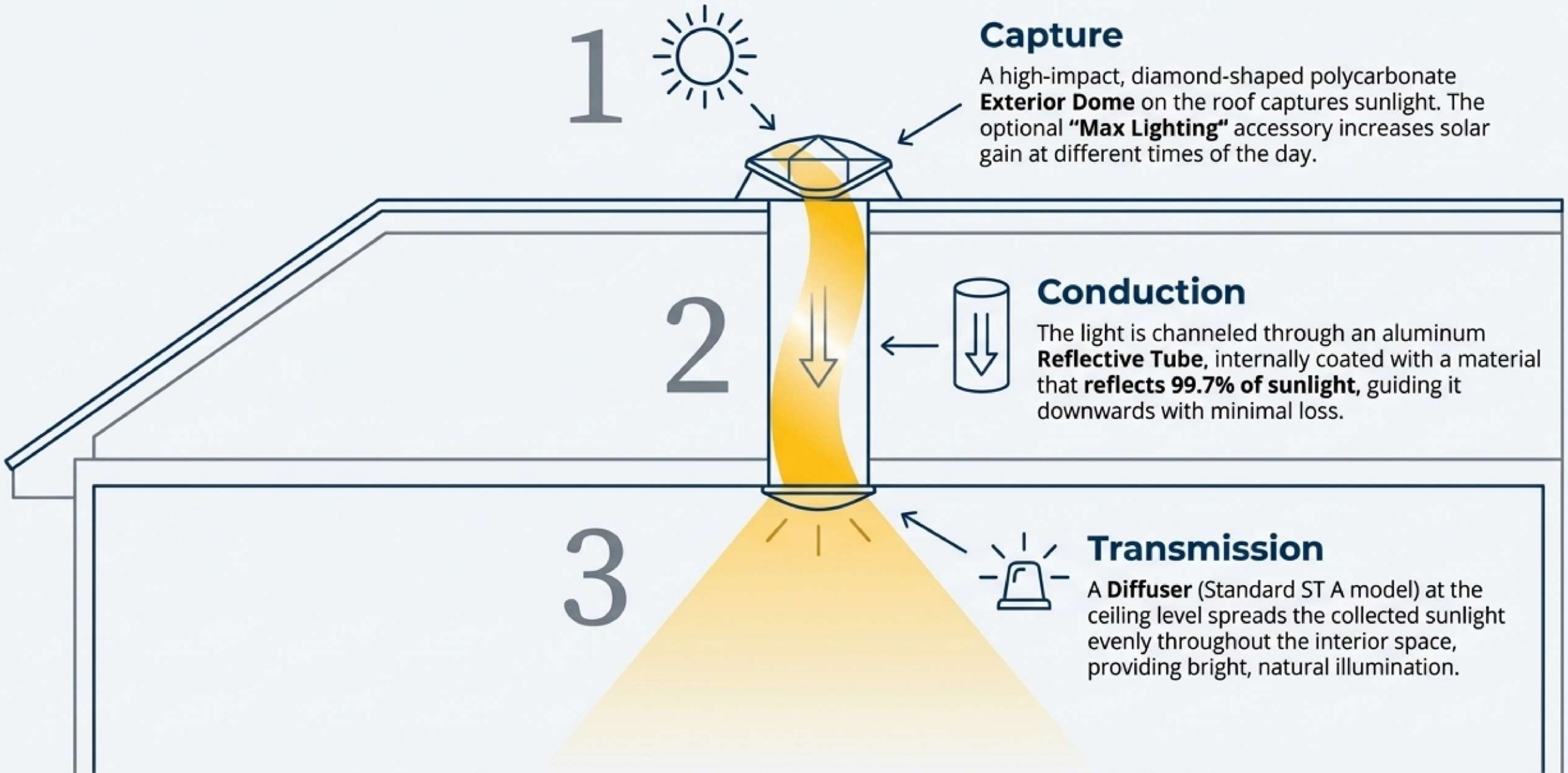
Constructed with UV-resistant materials for long-term performance.



Architectural Adaptability

Solutions for different roofing types and structures.

How It Works: The Journey of Sunlight



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Capture

A high-impact, diamond-shaped polycarbonate **Exterior Dome** on the roof captures sunlight. The optional **"Max Lighting"** accessory increases solar gain at different times of the day.

2

Conduction

The light is channeled through an aluminum **Reflective Tube**, internally coated with a material that **reflects 99.7% of sunlight**, guiding it downwards with minimal loss.

3

Transmission

A **Diffuser** (Standard ST A model) at the ceiling level spreads the collected sunlight evenly throughout the interior space, providing bright, natural illumination.

Component Analysis: Engineered for Superior Performance

Exterior Dome	High-impact diamond-shaped polycarbonate.	Ensures exceptional durability against environmental elements, guaranteeing long-term, uninterrupted performance.
"Max Lighting" Accessory	Increases solar gain at different times of the day.	Maximizes light capture from dawn to dusk, extending the hours of significant energy savings.
Reflective Tube	Aluminum coated internally with material that reflects 99.7% of sunlight.	Achieves maximum light delivery with minimal loss, ensuring high luminous efficiency and accelerating the return on investment.
Diffuser	Standard ST A.	Distributes captured sunlight evenly, creating pleasant, usable light without harsh glares.

Designed for Investment-Grade Reliability

Zero-Maintenance Reliability

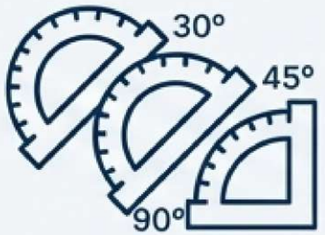
Completely hermetic and watertight.

The sealed design eradicates the need for ongoing maintenance, eliminating expenses and operational disruptions associated with bulb replacement, cleaning, and upkeep.

Long-Term Durability

Resistant to UV radiation.

Prevents material degradation from sun exposure, ensuring the system oxdiuains, ensuring the system maintains its structural integrity and high performance for years, safeguarding the initial investment.



Architectural Versatility

Adaptable to diverse roofing types.

Offers proven solutions for different roofing materials with multiple installation angles (30°, 45°, 90°), making it a viable solution for new and existing facilities without costly structural modifications.

Quantifying Performance: The Luminous Efficiency Data

Sky Condition (External Light)	Model TS 250 (Delivered Light)	Model TS 530 (Delivered Light)
Bright, Clear Sky (120,000 lux)	6,900 lux	20,000 lux
Standard Clear Sky (85,000 lux)	4,200 lux	13,000 lux
Overcast Sky (45,000 lux)	1,940 lux	6,350 lux
Heavily Cloudy Sky (20,000 lux)	770 lux	2,500 lux

Exceptional Performance:
A single TS 530 unit delivers over **6,350 lux** of functional light even on a cloudy day—enough to serve as a primary light source.

From Data to Daylight: Operational Implications

The verified luminous efficiency provides a compelling case for dramatically reducing—and in many cases eliminating—the need for electric lighting during daylight hours.

Clear Sky (13,000 - 20,000 lux)

Delivers extremely high light levels, sufficient to completely replace primary electric lighting systems during peak daylight.

Cloudy Sky (6,350 lux)

Offers significant functional lighting that substantially reduces the load on electric systems, generating savings even on overcast days.

Cloudy Day (2,500 lux)

Provides valuable supplemental light, contributing to energy reduction and improving interior ambiance even in poor weather conditions.

Key Insight: The TS 530's ability to serve as the primary lighting source, not merely a supplement, maximizes the hours per day that electric lighting can be deactivated.

The Trinity of Value: A Comprehensive Return on Investment

Economic Returns

Direct and predictable reductions in operational expenditures.

Environmental Profile

A tangible commitment to corporate sustainability goals.

Human Capital

Creation of healthier, more productive work environments.

1. Direct Economic Returns

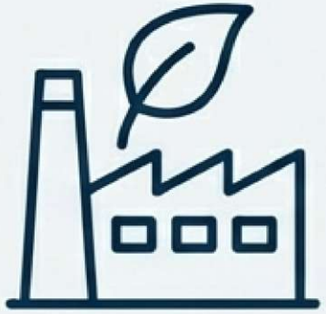
Significant Energy Cost Reduction

By providing thousands of lux of high-quality natural light, the system directly displaces the need for electricity for illumination during daytime hours. This leads to substantial, predictable, and recurring savings on utility bills.

Elimination of Maintenance Overheads

The ‘no maintenance required’ design provides a distinct and permanent cost advantage over conventional lighting systems, which demand ongoing expenses for bulb replacement, ballast servicing, and general upkeep.

2. Enhanced Corporate & Environmental Profile



Tangible Sustainability

Adopting this technology provides a concrete and visible means to reduce the facility's carbon footprint. It is a powerful statement of environmental commitment that aligns operations with corporate sustainability goals.

Eco-Friendly Operations

Utilizing natural light is an inherently 'eco-friendly' and sustainable operational choice that positions the organization as a responsible leader in its industry.

3. Improved Work Environment & Productivity

Creation of Healthier Environments

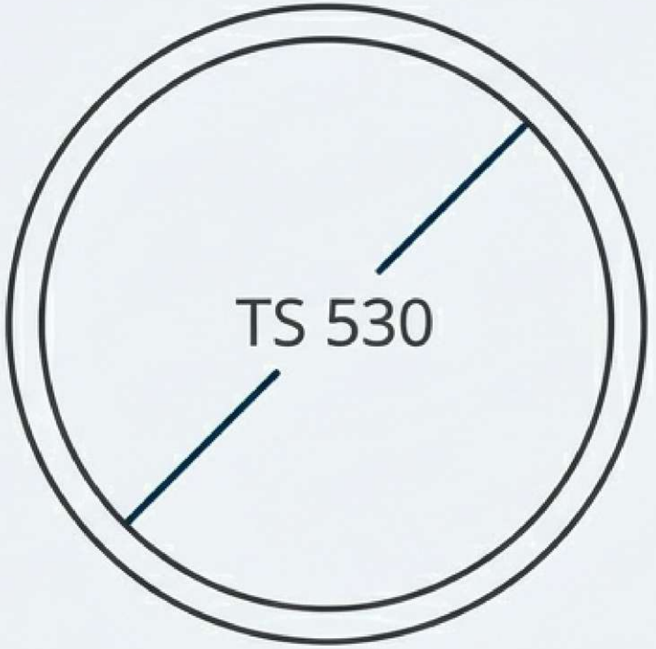
The system delivers ‘perfect natural light,’ which is instrumental in creating healthier, more pleasant, and more comfortable interior spaces for employees, customers, and visitors.

A More Productive Workforce

A well-lit, healthier environment is a proven driver of employee well-being and engagement. This investment contributes directly to creating the conditions for a more productive workforce.

Technical Specifications at a Glance

TS 250



Specification	Model TS 250	Model TS 530
Diameter	250 mm	530 mm
Standard Tube Length	625 mm	625 mm
Key Application	Ideal for smaller spaces or where lower light levels are sufficient.	Delivers ~3x the light output; ideal for high-ceiling industrial and commercial applications.
Installation Angles	30°, 45°, 90°	30°, 45°, 90°

Formal Recommendation: A High-Value Strategic Investment

The SUBER-TUBE SOLAR TUBE is more than a lighting product; it is a strategic investment in operational efficiency, long-term sustainability, and human capital. By leveraging a free and abundant natural resource, it offers a guaranteed method for reducing operating costs, meeting environmental targets, and improving the quality of the work environment.

The system's robust design, zero-maintenance requirements, and proven high performance make it a technologically and financially sound solution. We formally recommend the adoption of the SUBER-TUBE SOLAR TUBE system as a prudent and high-value investment for your organization.

Help Us Help You

Innovation in Protection.

The information provided is based on extensive practical experience and laboratory testing.
We recommend practical tests to ensure compatibility for each specific application.

Falconstema

2bis, Rue de Violettes,
98000 Monaco

info@falconstema.mc

+377 99 90 56 35