



RETHINKING LIGHT: A STRATEGIC APPROACH TO FACILITY PERFORMANCE

A proposal for the integration of the
LED-IN SOLAR TUBE SYSTEM.

MODERN FACILITIES FACE A DUAL DUAL IMPERATIVE



THE RELENTLESS PRESSURE TO CONTROL COSTS

Modern commercial facilities must constantly control and reduce escalating energy costs. Lighting often represents one of the largest single contributors to a building's operational budget.



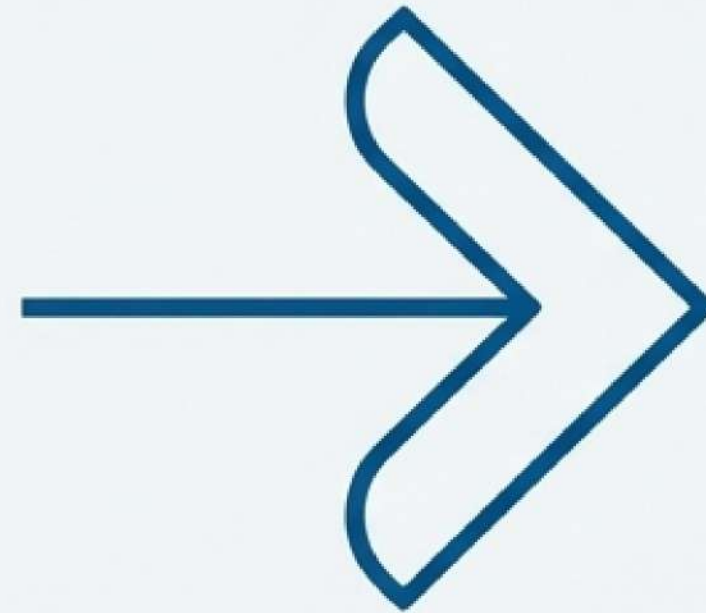
THE GROWING DEMAND FOR QUALITY ENVIRONMENTS

There is a growing imperative to create healthier, more productive environments for employees and customers. The quality of workspace directly impacts well-being, focus, and performance.

THE SOLUTION REQUIRES A FUNDAMENTAL SHIFT IN THINKING

THE OLD PARADIGM: PERPETUAL ENERGY CONSUMPTION

Artificial lighting is a perpetual operational expense, consuming electricity and contributing to a facility's carbon footprint. It is a utility to be managed.



THE NEW PARADIGM: INTELLIGENT RESOURCE UTILIZATION

Daylight is a free, abundant, and inexhaustible natural resource. The goal is to shift from consumption to the intelligent harnessing of this asset.

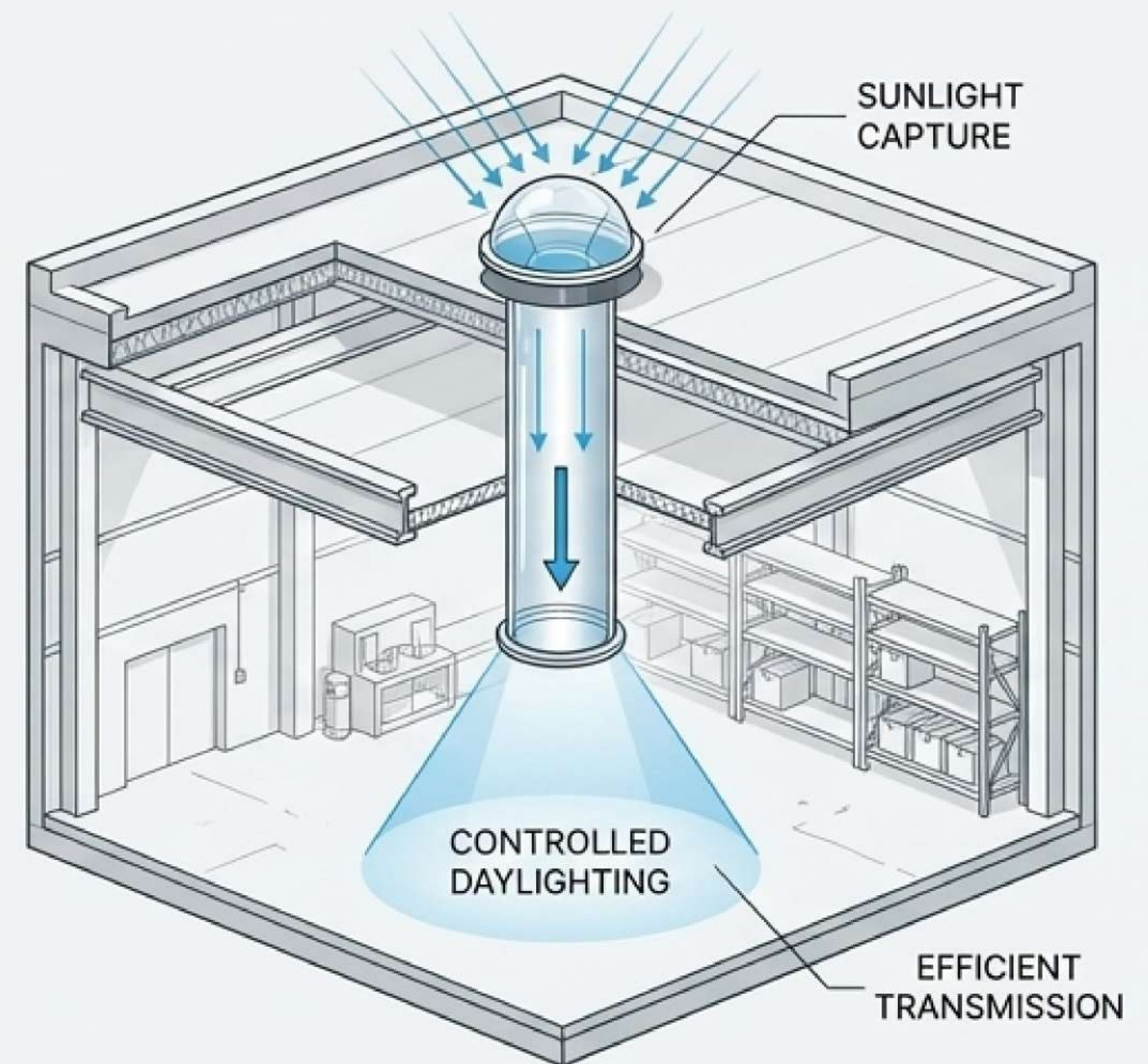


THE LED-IN SOLAR TUBE SYSTEM: AN ENGINEERED SOLUTION FOR DAYLIGHTING

The system is an innovative technology designed to efficiently capture, conduct, and transmit natural sunlight from the rooftop to illuminate interior spaces. It provides a powerful, eco-friendly, and economical alternative to constant electricity consumption.

IDEAL APPLICATIONS

- Industrial Plants
- Warehouses and Distribution Centers
- Shopping Centers and Large Retail Spaces



HOW IT WORKS: A THREE-STEP PROCESS OF ELEGANT ENGINEERING



1. CAPTURE

A high-impact, diamond-shaped polycarbonate **Exterior Dome** captures maximum sunlight. An integrated "**Max Lighting**" accessory increases solar gain during early morning and late afternoon.



2. CONDUCT

A **Reflective Tube** made of aluminum channels the light downwards. Its internal coating reflects **99.7%** of captured sunlight, ensuring minimal loss during transmission.



3. DIFFUSE

At the ceiling, a **Standard ST A Diffuser** disperses the natural light evenly throughout the interior space, providing bright, usable illumination without glare.

A STRATEGIC INVESTMENT DELIVERING RETURNS ACROSS THREE KEY DOMAINS



FINANCIAL PERFORMANCE

Directly reduce operational costs and create a more resilient operating budget.



HUMAN PERFORMANCE

Foster healthier, more productive environments through perfect natural light.



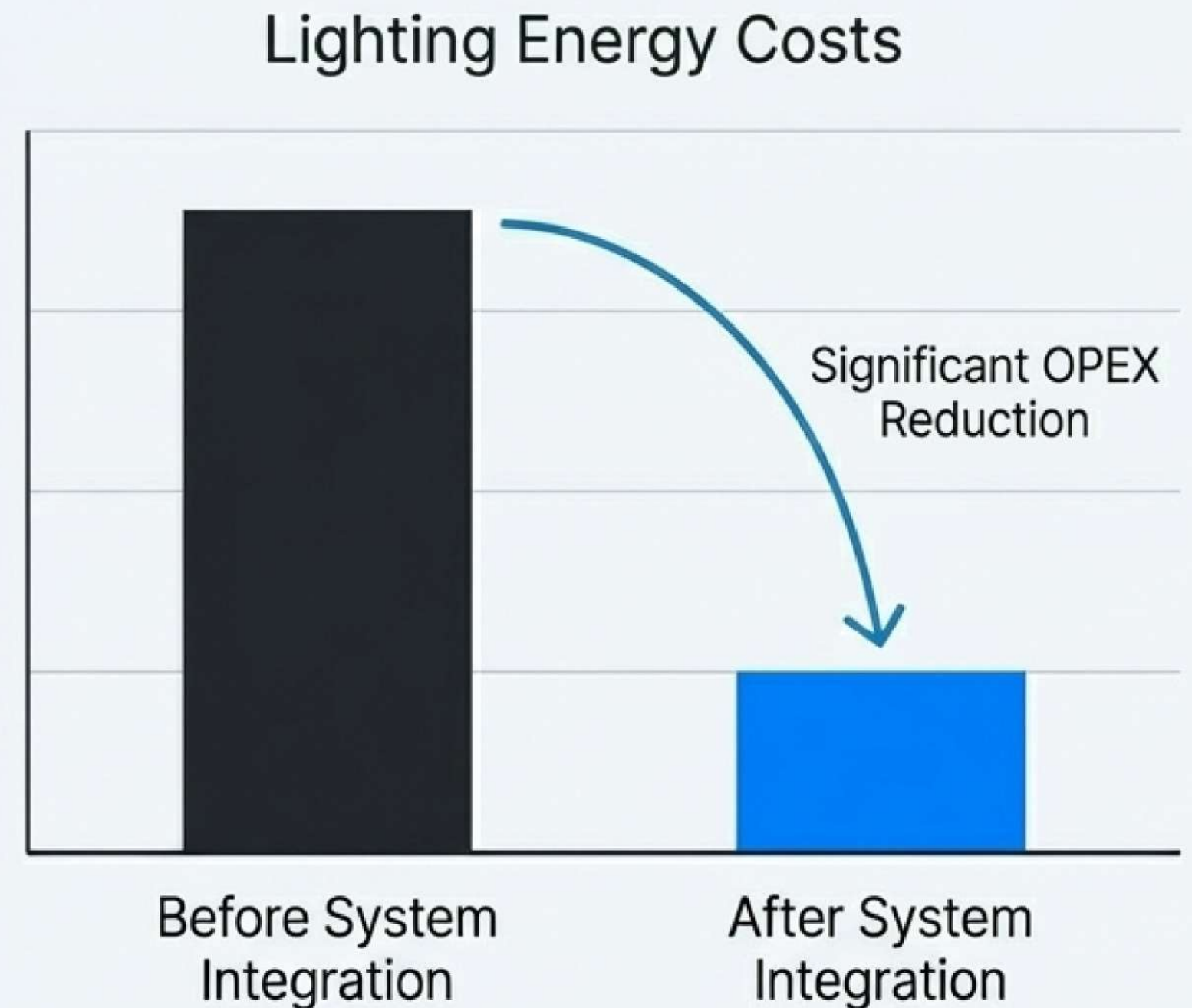
ASSET PERFORMANCE

Invest with confidence in a durable, maintenance-free, and reliable technology.

PILLAR 1: SUBSTANTIALLY REDUCE ENERGY CONSUMPTION AND COSTS

The system provides a direct, economical alternative to electricity consumption, significantly lowering energy bills.

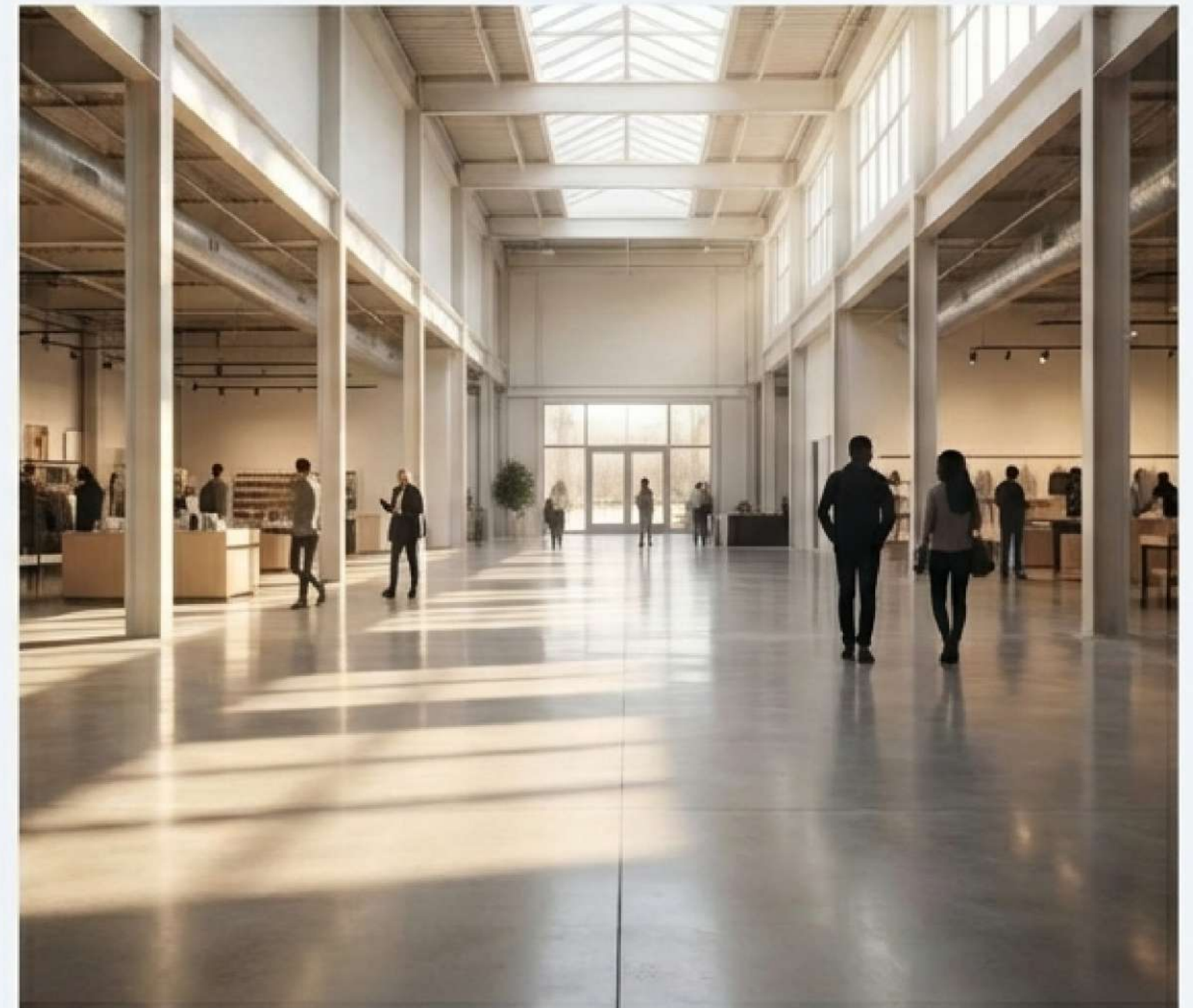
- Displaces the need for artificial lighting, one of the largest contributors to a commercial building's energy load.
- High luminous efficiency translates directly into reduced operational hours for electric lights.
- Leads to a more predictable and resilient long-term operating budget.



PILLAR 2: CREATE HEALTHIER AND MORE PRODUCTIVE ENVIRONMENTS

The system delivers “perfect natural light,” which has been consistently shown to improve human well-being and performance.

- Fosters a healthier environment for employees and customers, moving away from the harsh, static nature of artificial lighting.
- Contributes to improved focus, reduced eye strain, and an overall enhancement of the occupant experience.
- Acts as a demonstrable commitment to workplace quality.



PILLAR 3: ENGINEERED FOR LONG-TERM, MAINTENANCE-FREE RELIABILITY

The **LED-IN SOLAR TUBE SYSTEM** is a “set and forget” solution, designed with robust components for years of dependable operation.

- **Hermeticity and Watertightness:** A completely sealed assembly prevents water ingress and requires no ongoing maintenance.
- **UV Resistance:** All materials are specified for resistance to ultraviolet radiation, ensuring long-term durability and color stability without degradation.
- **Guaranteed Adaptability:** Solutions for different roofing types are 100% reliable and guaranteed, ensuring structural integrity.



PERFORMANCE YOU CAN MEASURE: LUMINOUS EFFICIENCY DATA

The following table quantifies the interior light output (illuminance in lux) delivered by each model under various external sky conditions, demonstrating exceptional effectiveness.

| Sky Condition (External Illuminance) | TS 250 Output (lux) | TS 530 Output (lux) |
|---|---------------------|---------------------|
| Clear Sky (120,000 lux at 2:00 p.m.) | 6,900 lux | 20,000 lux |
| Clear Sky (85,000 lux at 2:00 p.m.) | 4,200 lux | 13,000 lux |
| Cloudy Sky (45,000 lux at 2:00 p.m.) | 1,940 lux | 6,350 lux |
| Cloudy Day (20,000 lux at 2:00 p.m.) | 770 lux | 2,500 lux |

The TS 530 model delivers over 6,350 lux—a level suitable for many detailed industrial tasks—even under significantly overcast conditions.

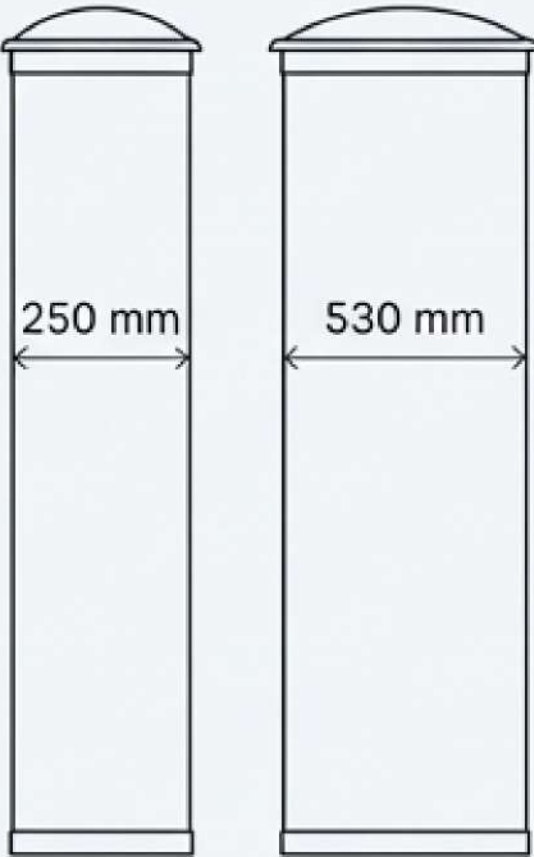
SYSTEM COMPONENTS AND TECHNICAL SPECIFICATIONS

ADVANCED SYSTEM COMPONENTS

- Exterior Dome: High-impact diamond-shaped polycarbonate.
- Reflective Tube: Aluminum with internal coating reflecting 99.7% of sunlight.
- Diffuser: Standard ST A model for even light distribution.
- Accessory: “Max Lighting” accessory to increase solar gain.

PHYSICAL SPECIFICATIONS

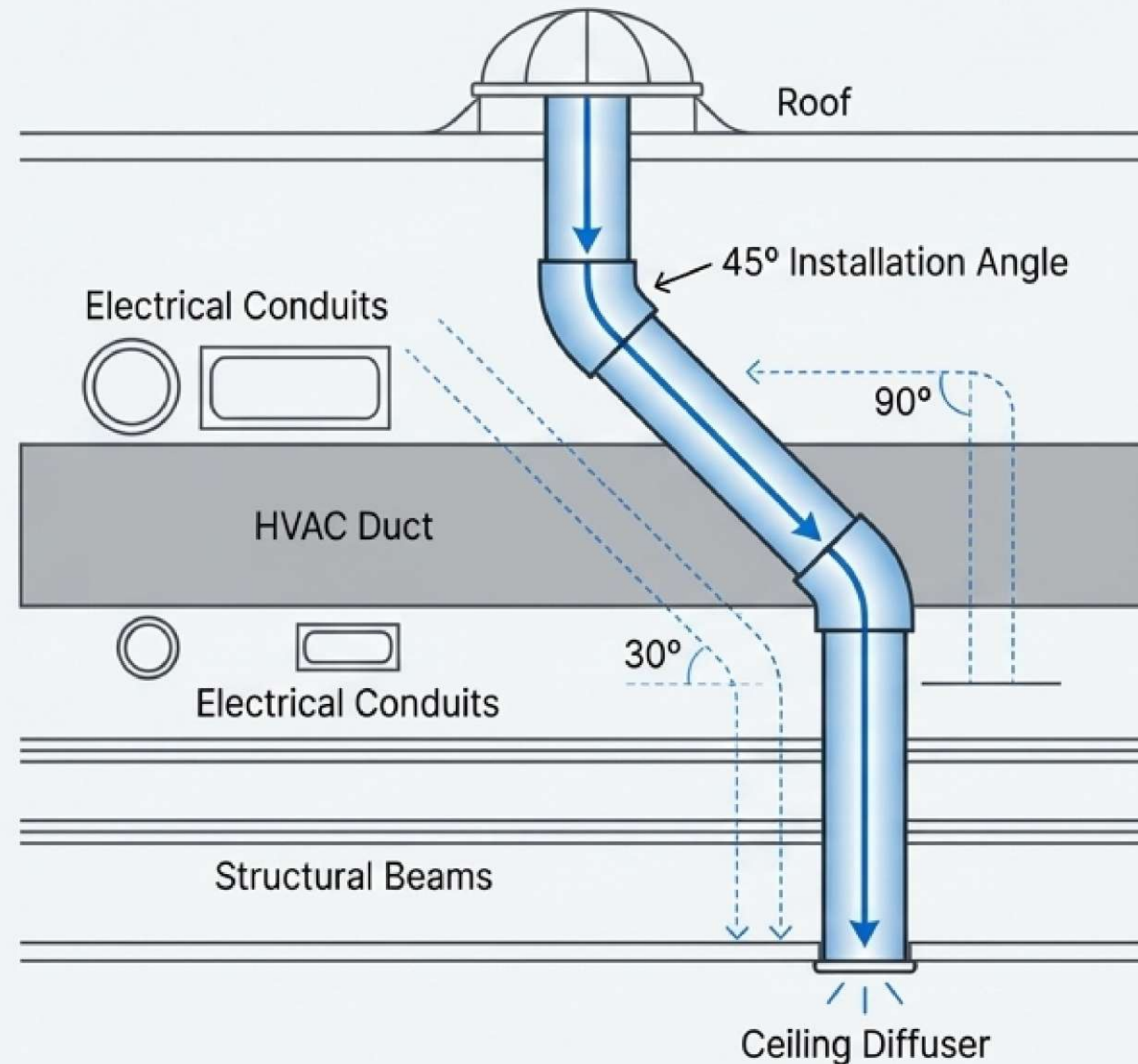
| Model | Diameter | Tube Length |
|--------|----------|-------------|
| TS 250 | 250 mm | 625 mm |
| TS 530 | 530 mm | 625 mm |



DESIGNED FOR FLEXIBLE AND SEAMLESS INTEGRATION

KEY MESSAGE

The system is engineered for versatile integration into a wide range of commercial and industrial roofing structures, ensuring a reliable and watertight installation.



CORE FEATURE:

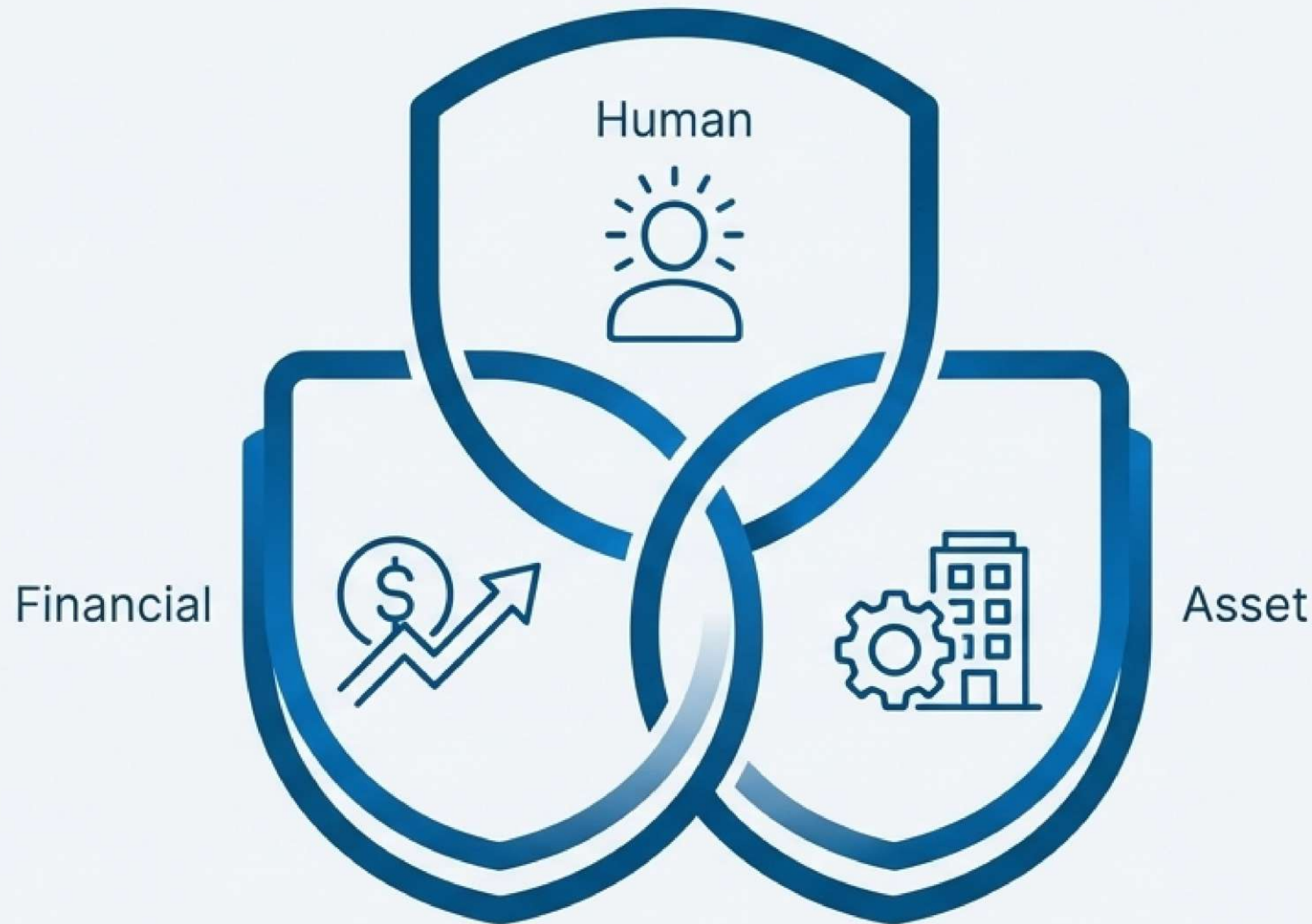
NAVIGATING OBSTRUCTIONS

The system accommodates various roof pitches and designs through three standard Installation Angles: 30°, 45°, and 90°.

BENEFIT

These angles allow the reflective tube to bypass common overhead obstructions—such as HVAC ducts, electrical conduits, and structural beams—delivering daylight precisely where needed. This is critical for streamlining retrofit projects and reducing total project cost.

A SINGLE INVESTMENT FOR COMPREHENSIVE FACILITY TRANSFORMATION



The **LED-IN SOLAR TUBE SYSTEM** delivers a compelling return across the critical domains of facility management. It is a holistic solution that provides:

- **Significant, direct cost reductions** through lower energy consumption.
- A **healthier and more productive environment** through the introduction of high-quality natural light.
- **This value through a durable, reliable, and maintenance-free technology.**

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.



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