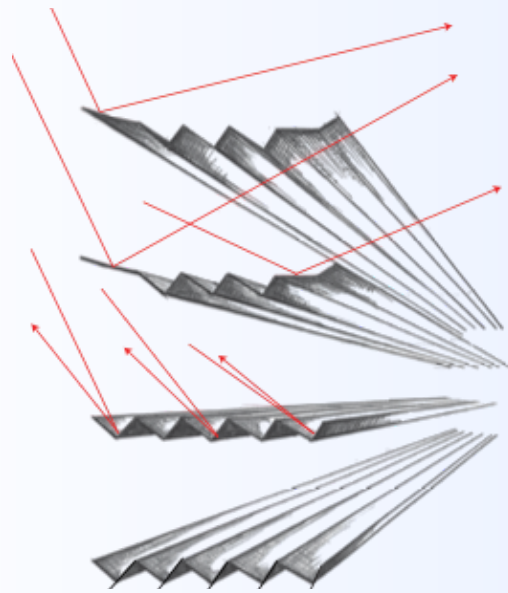




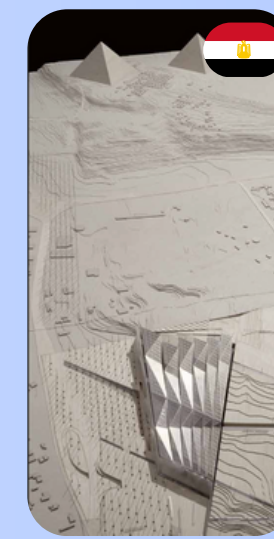
More Light, Less Heat.

Save up to 30% on your energy costs
with RETROSolar's daylighting louvers



retrosolar.us

info@retrosolar.us



Daylight Redirection Systems

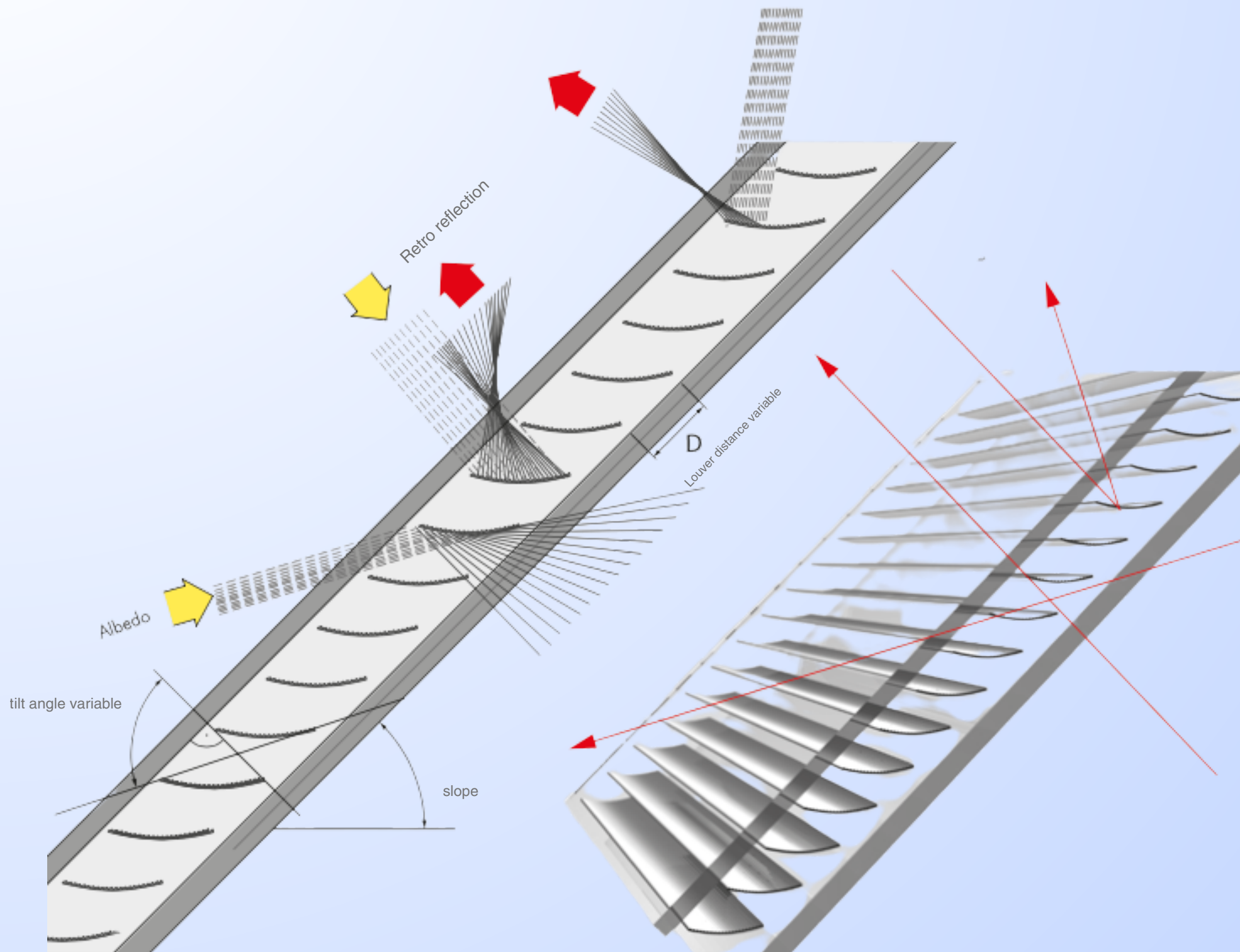
RETROSolar daylighting uses mirror-optic louvers to channel daylight deep into buildings while reflecting unwanted heat outdoors.

The result: bright, glare-free interiors with lower cooling and lighting costs.

Save electric
lighting

Reduce
climate loads

Promote health
& wellbeing



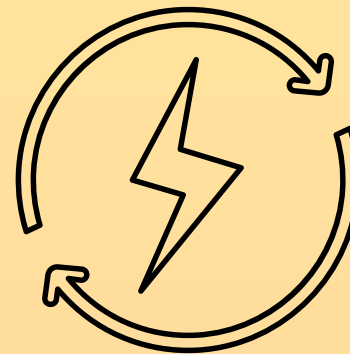


A Paradigm Shift in Daylighting



More daylight,
increased productivity

Delivers natural light deep into the floorplate for glare-free, well-lit workspaces – boosting employee focus, well-being, and performance.



Up to 30% lower
energy bills

Up to 50% less artificial lighting needed and ~85% lower solar energy transmission vs. standard internal blinds, cutting cooling loads and total energy consumption by up to 30%.

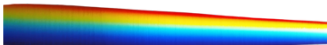


Cooler in the summer,
warmer in the winter

Keeps interiors comfortable year-round by cutting heat gain in summer and reducing heat loss in winter – while lowering reliance on artificial cooling and lighting.

How is RETROSolar different from other daylighting technologies?



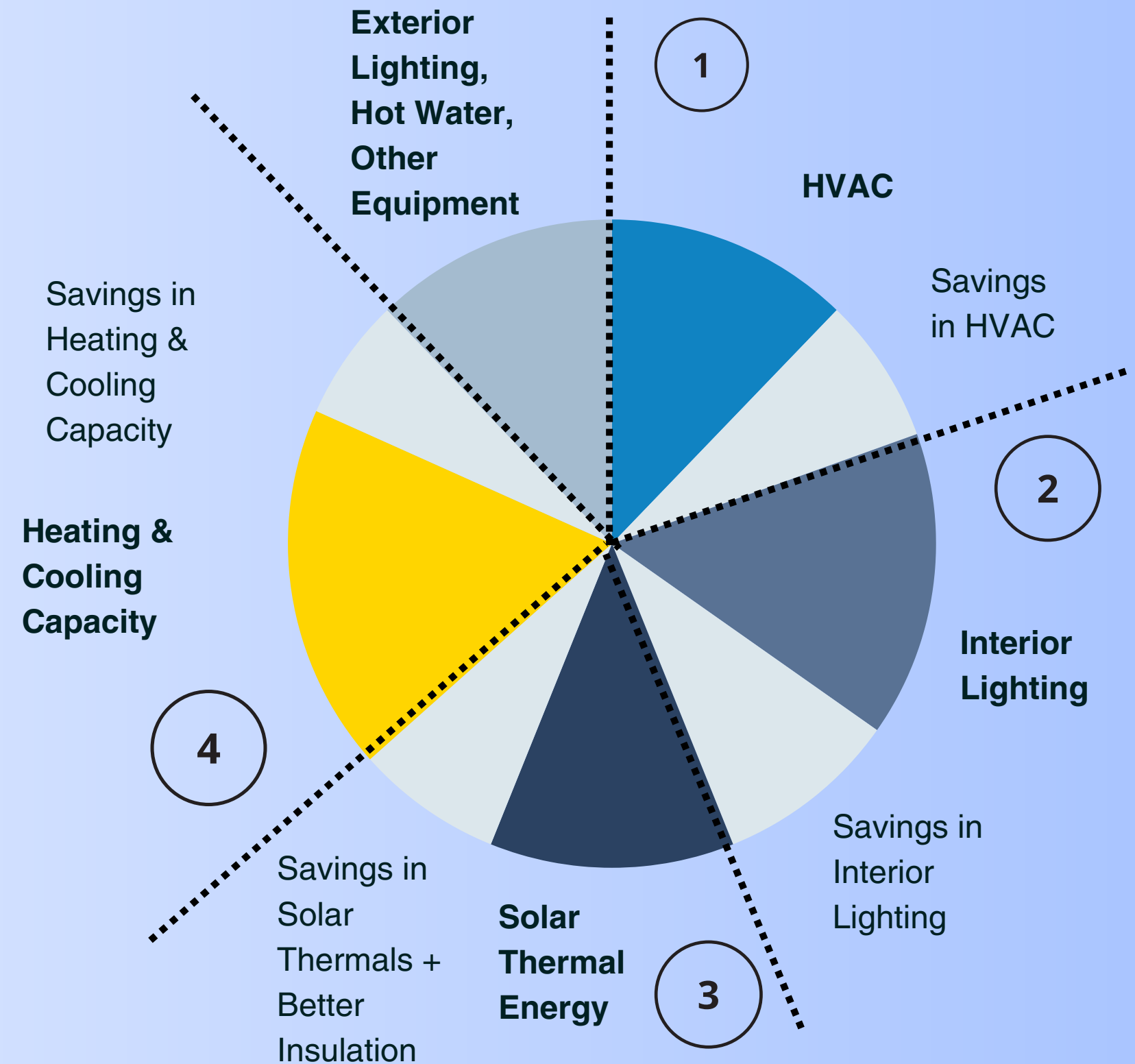
	Technology	What it does	Typical pain points	RETROSolar advantage
	Conventional blinds/shades	Block/soften daylight	Dark rooms → more electric light; adds cooling load	Keeps daylight, cuts glare/heat with passive optics → ~25–30% lower lighting & cooling energy
	Motorized shades	Automated fabric/shade control	Drives, wiring, controls, maintenance	Similar comfort without required motors or firmware—low operating expenses, fewer failure points
	Electrochromic glass	Tints IGUs to limit glare/solar gain	High cost; wiring/control boxes; slow transitions	Comparable solar control without replacing glass or additional electronics; retrofit-friendly
	Light shelves / micro-prism films	Redirect light to ceiling	Limited depth; seasonal inconsistency	Bifocal mirror-louvers: reject high summer sun, pull diffuse/winter light deeper into space
	Skylights	Top-light rooms	Heat gain and glare if unmanaged	RetroRoof modules admit winter sun, reject summer heat for controlled toplighting



RETROSolar daylighting technologies pay for themselves in four ways.

Savings are calculated with a proprietary software, considering temperature, time of year, and geographical region. The software can also be used to further optimize the louvers after installation.

In collaboration with



Already proven in 6,500,000 sq ft of projects, such as...



Central Bank of Kuwait, Kuwait City



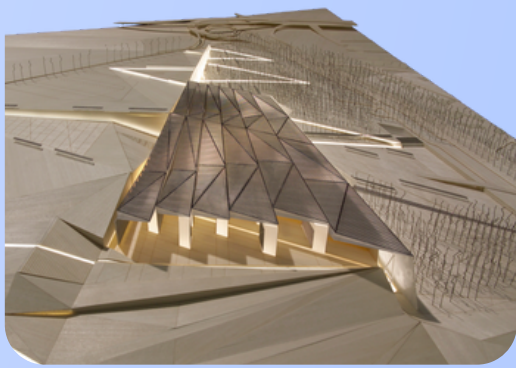
Complex Cultural Centre, Seoul, South Korea



Fürstenwall Dusseldorf, Germany



Santander Bank Sao Paulo, Brazil



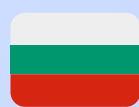
Grand Egyptian Museum, Cairo, Egypt



Clariant, Shanghai, China



BNP Paribas Paris, France



Sopharma Litex Towers, Sofia, Bulgaria



Standard Bank of Johannesburg, SA



ONE, Frankfurt

summer sun

Paradigm Shift in Blinds

The Future: Daylight Management with Mirror Optics

RETRO  SOLAR



Uniqueness of Köster* technology based on mirror optics:

- lowest SHGC values, dimming of intense solar radiation
- precision in light guidance
- protection and supply function provided
- maximum user comfort due to simultaneous view through
- natural daylight spectra are maintained
- beneficial to health

winter sun

Bifocal Louver Optics

with integrated functions controlled by the angle of incidence of the sun



horizontal louver position

light in

heat in

view through

glare free

Unprecedented possibilities in the simultaneity of the most important sun protection functions:

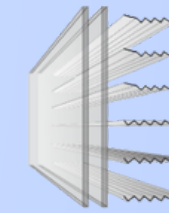
- best transparency due to slimmest louver cross-sections
- deflection of the overheating summer sun
- glarefree supply of natural daylight
- energy input controlled via the angle of sunlight incidence
- self control of the functions
"heating" and „cooling“ by means of light deflection
- healthy daylight

- optical daylight modulation
- optical energy transport
- optical heat control

Product Lines In Use Worldwide

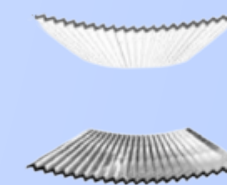


RETROLux



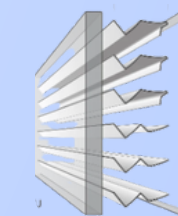
Macro-structured bifocal louvers for external and internal blind systems.

RETROFlex



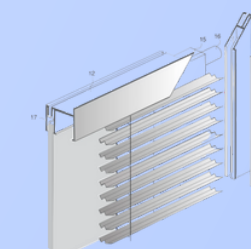
Micro-prism- structured light redirecting louvers for blind systems.

RETROTherm



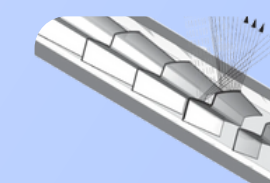
Fresnel strips sealed in IGUs to deepen daylight and cut heat gain.

RETROFacade



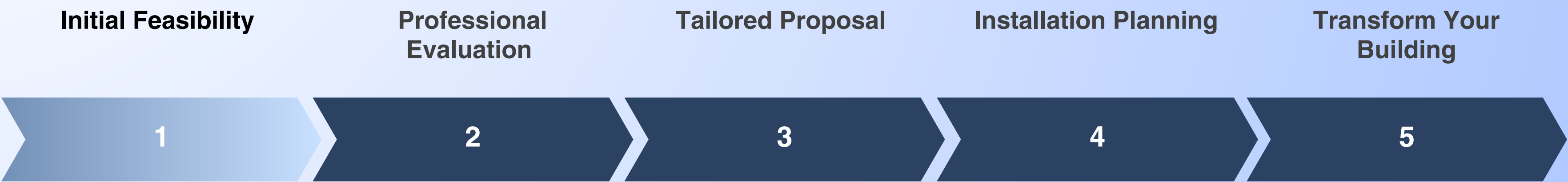
Daylight control systems in windows and facades, including media facades.

RETORoof



Retro technology in the roof.

Next Steps



*Have a new build
or retrofit in mind?*

Submit answers to our feasibility questions (next slide), and our team will provide an estimate for your project.

We'll assess your property for optimal system integration.

Receive a detailed plan with costs, savings, and design options.

Coordinate to minimize disruption to your operations.

Enhance comfort, efficiency, and sustainability with RETROSolar today.

Information we require from you for an initial estimate of (a) reduced energy transmission, (b) daylighting gain, and (c) economic analysis for your project.

1. General Information

- a. Please provide a brief overview of your building, including: latitude, façade orientations, total glazing area, and floor area.
- b. What solar shading system have you used- or are you planning to use? (e.g., interior blinds, exterior roller shades, overhangs, etc.)

2. Glazing Area

- a. For each shading unit, what are the required dimensions (height × width)?
- b. How many windows are present, and what are their orientations?
- c. What fraction or area of the glazing should be shaded (e.g., in ft² or m² to be covered)?

3. Glazing Specifications

- a. What type of glazing does your building use? (single-, double-, or triple-glazed)
- b. What is the Solar Heat Gain Coefficient (SHGC) for the glazing?
- c. Please share the specifications for light transmission, absorption, and reflection of the glass.