For your house and your activity **Environment protection**





The skylight system that brightens the darkest ar eas of any buildings with its natural daylight without heating. SOLARSPOT[®] can be used in houses and factories, commer cial and public buildings to brighten, even the enclosed ar eas.



2003

NEWS!! LEDSOLARSPOT® & Diameter 900 mm

> **BATIMAT** - Paris Gold medal for the innovation 2006 - ATEC 6/06-1672 2008 - ATEC 6/08-1798 2011 - ATEC 6/11-1975 2014/2019 - ATEC 6/14-2204



Management System ISO 9001:2008



Médaille d'Or

BATIMAT

H

ISO 9001: 2008 COMPANY





Mission

SOLARSPOT INTERNATIONAL SRL is an Italian company totally owned by a single family; it is the results of the incor poration (2009) of other two company: Energo Project srl operating from 1981 and Solar Project srl operating since 2003.

From their foundation the main activity of all the companies w as totally devoted the research, development and application of renewable energy technologies to existing and new buildings. Progressively more interest of the company was focused on day lighting by tub ular skylight that due at the substantial de velopment and performance patented (USA-Europa), improvements achieved, became the strongest asset of the company.

The change of the name in SOLARSPOT INTERNATIONAL SRL simply show the international vocation of the company and the force of the most popular product trademark, nowadays is going to export more than 90% of its production; SOLARSPOT[®] is the main registered trademark naming all the systems we produce.

Presently the company directly employs 20 people, while through our dealer netw ork or indirectly through associate companies and suppliers we estimate that there are in excess of 1000 people working to promote the growth of Solarspot worldwide and our mission to daylight the world by tubular daylight guidance systems according CIE definition (report TC 3-38 173:2006). The company is associated at UNIVA and CONFAPI as Small Industry Italian Sector and member of KYOTO CLUB.

Recently another patented br and, LEDSOLARSPOT[®], has been introduced to the mar ket. This fully hybrid lighting system utilizes the latest LED (elettronically dimmab le) technology with Solarspot patented da ylight innovation to provide a totally integrated lighting solution that delivers TOP energy saving results.









Well-being and natural sunlight

As we know, the natural sunlight is an indispensable sour ce of life for the living or ganisms. It has remarkable psychological effects for the quality of the vision of individuals and for their well-being as well: the feeling of a well-aired place, the perception of the true natural colours without distortions, the r egulation of the biological cycles: the abstention of sunlight is the principal cause of some depressing pathologies.

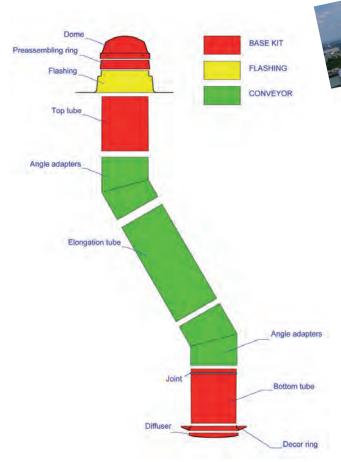
Principle of SOLARSPOT® system

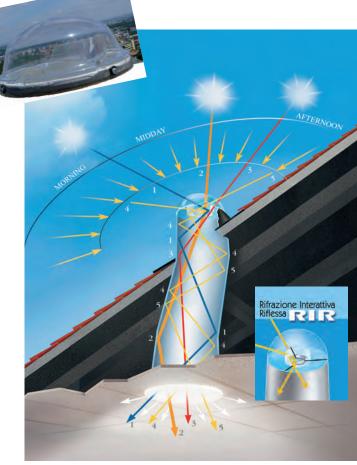
SOLARSPOT[®] is a lighting system that catches the sunlight in any sky condition (clear or oværast) coming by every direction, thanks to its specific components: the transpar ent dome in anti-shock acrylic, protected against UV rays, the optical intercepting device RIR[®] - a true light funnel - that r edirects all light beams coming from North and even the lowest on the horizon, inside the transfer cylindrical duct, made of internal and super -reflective surfaces of Vegalux[™]. Bouncing on the specular surface of the duct, the light beams each and cross the translucent diffuser (available with many finishings) by cr eating a highly lighting surface (cir cular or quadrangular) on the ceiling, capable of lighting even the darkest ar eas. Diffusing the light from the top of the ar ea, SOLARSPOT[®] increase the room daylight and make more homogeneous the natural luminance of room walls not so regular when produced only by side and roof windows. Above all brings the benefits of natural light into the enclosed areas that would be still dark without its contribution (world patents). SOLARSPOT[®] blocks UV rays and doesn't heat the areas with direct heating, usually produced by glass windows and traditional skylights.

Energy saving and environmental protection light up even our future

As soon as we have suficient and free sunlight, the daily excess of artificial lighting constitute a wasting of pecious electrical energy. During summer, enlightening the big areas of workplaces by SOLARSPOT[®], you can save the energy to refresh them from the heating produced by electric lamps. SOLARSPOT[®] contributes to reduce the abuse of the precious fossil fuels and the inevitable envir onmental pollution which derives from, true natural disasters wasting non-renewable resources which should be protected keeping their availability and use, for the uses "that cannot be renounced" in the many daily current and future activities.

Capturing, redirectioning and conveying of diffused and direct light





System components - certifications

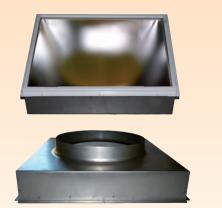


CROTEO

Universal flashing, for any diameter, tile and sloping roof



Metal transition box with glass diffuser: reaction to fire M1

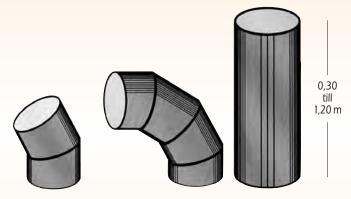


Electrical and manual darkening systems





Angle adapters and elongation tubes



COMPONENTS OF PRE-ASSEMBLED KITS

Capturing devices with RIR, pre-assembling rings for the fastening to the flashings of roof exit, starting tube and room-tube, (unified in lamp kits) with completely assembled diffusers and finishing frame, and accessories in suitable packs. Instructions for a **quick and correct assembly**



CSTB - CENTRE SCIENTIFIQUE ET TECHNIQUE DU BATIMENT - PARIS AVIS TECHNIQUE n° 6/11 - 1975 Download from www.cstb.fr CERTIFICATES AND EXPERIMENTAL RESULTS FOR AVIS TECHNIQUE

1 - Durability test of 3000h en WOM Cl65 (Atlas, BST = 60° C) on the brown watertight sheet associated with a 250mm SOLARSPOT[®] system. Test report CSTB n° BV05-491 dated 26th J uly 2005.

2 - AEV test on pre-assemb led kit of the 530mm diameter SOLARSPO T $^{\circ}$ system. Test report CSTB n° BV05-441 dated 7th July 2005.

3 - Choc test on the dome of the 250mm diameter SOLARSPOT* system. Test report CSTB n° BV05-440 dated 7th July 2005.

4a - Fire-reaction test on PROTEO® - Formula 5682 brown watertight sheet of fireproof synthetic rubber.

PV N° RA05-0525 dated 8th December 2005.

4b - Renewal of the fire-reaction test on PROTEO® - Formula 5682 brown watertight sheet of fireproof synthetic rubber. PV N° RA11-0231 (05.10.2011).

5 - Calculation of ther mal dispersion through the light ducts . Thermal study report. CSTB - Affair 05-027 DER/HTO 2005-140-FL/LS dated 1st August 2005.

6 - Char acterization of the luminous perf ormance on pre-assemb led kit of the 250 mm, 375mm, 530mm e 650mm diameter SOLARSPOT[®] systems. Luminous balance data present at the end of the technical dossier for the Avis Technique. Test report CSTB n° EN-ECL 05.02C dated 28th J une 2005.

7 - Optical characterization in transmission and reflection of the elements of the SOLARSPO T[®] system.

Test reports n° CPM/05-0047 dated 16th September 2005.

8 - Identification by IRTF spectroscopy of organic materials that intervene in the man ufacture of elements

of the pre-assembled kits of the SOLARSPOT® system. Test report n° BV05-575 dated 27th July 2005.

9 - Durability test of 4000 h (BST = 65°C with cycle for plastic materials) en WOM c 15000 (ATLAS) of the dome in PMMA associated with a SOLARSPOT[®] system. Test report n° CPM 05-0009 (September - October 2005).

10 - Operative test on a preliminar y model of a pre-assembled kit 250 mm SOLARSPOT[®] system for a covering plain terracotta roof tiles and PROTEO[®] universal outlet from the roof CSTB (July - August 2005).

11 - Operative test on a preliminar y model of a pre-assembled kit 375 mm SOLARSPOT[®] system for a covering of double interlocking roof tiles with a weak relief to the extrados and PROTEO[®] universal outlet from the roof - CSTB (July - August 2005).

12 - Oper ative test on a preliminar y model of a pre-assemb led kit 530 mm lamppost type SOLARSPOT® system for a covering of double interlocking roof tiles with a strong relief to the e xtrados and PROTEO® universal outlet from the roof - CSTB (J uly - August 2005).

13 - Characterization of the luminous performance of the new diffusers' transition boxes. Test report CSTB n° EN-ECL 08.08.C (June 2008).

14 - Fire-reaction test on VULCANO-V33S, rolled glass Type 33.1 assembled with a sheet of PVB. PV N° RA08-0242 dated 7th July 2008.

15 - Characterization of the luminous performance. Complementary measures. Test report CSTB n° EN-ECL 09.02.C (January 2009).

16 - Fire-reaction test on VULCANO DQL, flat plate in polycarbonate f or light duct (translucent circular Fresnel lens). PV N° RA09-0069 dated 4th March 2009.

17 - Fire-reaction test on LEXAN EXELL D FR, r $\,$ igid plate in co-e xtruded transparent polycarbonate by UV treatment. PV SNPE N° 13145-07 dated 21st F ebruary 2007.

18 - Fire-reaction test on LEXAN 9030FR, plate in fireproof white opal polycarbonate . PV LNE N° G020154 - CEMATE /1 dated 15th February 2006.

19 - A udit report n° 2031521/1A: production site of "SOLARSPO $\ T^{\otimes *}$ systems . Bureau Veritas (17.07.2009).

OTHER CERTIFICATIONS

SP Technical Research Institute of Sw eden N. 0402-CPD-P902844A (07.10.2009), fire-reaction test on Makrolon UV clear 2099 and Makrolon UV white 2150, respectively polycarbonate plates respectively uncolored and opal white.



For architects and building designers needing to pr ovide daylight solutions with guaranteed minimum light levels

LEDSolarspot, the world's most efficient tubular daylight system (according to CIE TC3-38 Report 173-2006, France Atec 06/11-1975 and other official comparison) is now integrated with the most advanced dimmable LED technology to provide a total lighting solution that maximises energy efficiency whilst providing essential daylight for human well-being. (USA and European Patent) Each Solarspot ceiling unit is fitted with dimmab le, interactive banks of LED lamps, either circular or square, that are contro lled by light sensing panels that are programmed to deliver a minimum level of light to the room. Throughout the day, the panel monitors the ambient light le vels and if the daylight levels drop below a certain point, or it just gets dar k as the sun goes do wn, the dimmable LED units are activated to replace the natural light to maintain the pre-set le vels. Conversely, as the external daylight levels increase, the LED lamps are dimed, or even turned off completely.

This logical, yet revolutionary, solution provides maximises energy savings and green credentials whilst producing superb benefits for the buildings occupants.





Benefits Energy saving potential

For buildings that are occupied predominantly during daylight hours, the energy saved from only using electric lighting when the da ylight levels are insufficient to pro vide the required levels could be as m uch as 85%. For building occupied for longer periods of the day, the savings with be commensurate with the hours of occupation. The advantage of the system is that it removes the human intervention factor – people arriving in the dark and then leaving the lights on all day, or just turning on the electric lights by force of habit.

Improved comfort

Through constant monitoring and adjustment of the light within the space , the building designer or owner can preset the minimum levels of light appropriate for the space in the knowledge that these will be consistent and will not be interfered with.

Reduced maintenance costs

By controlling and regulating the use of the electr ic light systems the w orking life of luminaires can be g reatly increased. This not only reduces the cost of replacing individual lamps or luminaires b ut the often g reater cost of access and labour. By considerably reducing the demand on the luminaires life expectancy can be greatly increased.

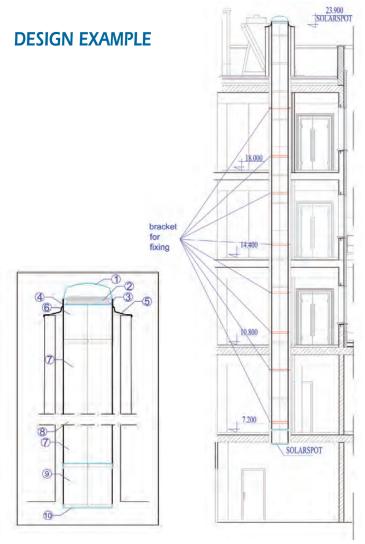


TECHNICAL SPECIFICATION



SQUARE	ROUND	LAYOUT	SPECIFICATION	IDEAL FOR		0
	6 LED Max suggested: W 25 2000 lm		Diameter 250mm Max length 7m Coverage 12sqm For use with plaster-board, suspended and open- cellings. Square and round	- Bathrooms - En suites - Corridors - Landings - Hallways	D-25 The smallest system in the range and designed for domestic installations and smaller areas of commercial buildings. At only 250mm in diameter, the D-25 will fit in to virtually any building structure.	D-25
20 LED Max suggested: W 80	12 LED Max suggested: W 55 4400 lm		Diameter 375mm Max length 11m Coverage 22sqm For use with plaster-board, suspended and open-ceilings. Square and round diffuser styles available.	 - Large bathrooms - Kitchens - Corridors and entrance halls - Living rooms - Smaller offices 	This mid-sized system is designed for larger domestic installations and smaller areas of commercial buildings. At just 375mm in diameter, the D-38 will fit in to most building structures without the need for structural alterations.	D-38
Max suggested: W 100	22 LED Max suggested: W 88 8800 (m		Diameter 530mm Max length 15m Coverage 32sqm For use with plaster- board, suspended and open-ceilings. Square and round diffuser styles available.	 Offices Workshops Smaller manufacturing facilities Wider corridors Classrooms 	Used on its own, the 530mm system is ideal for lighting medium sized spaces or it can be used in multiples for lighting larger offices, classrooms or commercial spaces. The 530mm diameter alows it to fit through most commercial building structures and roofs.	D-53
40 LED Heave w 160	30 LED Max suggested: W 120		Diameter 650mm Max length 20m plus Coverage 50sqm For use with plaster- board, suspended and open-relings. Square and round diffuser styles available.	 Manufacturing facilities Warehouses Retail sheeds Entrance galleries Sports arenas and centres Logistics and distribution facilities 	This 650mm diameter unit is designed to be used in multiples to light larger spaces with high ceiling levels. The unit can be used as a simple lamp unit for lighting open-ceilinged industrial spaces, or it can be supplied with adjustable angles and extensions, allowing for daylight to be piped over distances of 20 meters plus, into the heart of a building.	D-65
60 LED 800 LED 25000 Im	40 LED Max suggested: W 160 16000 lm		Diameter900mm Max length 30m plus Coverage 95sqm For use in open celling environments.	 Manufacturing facilities Warehouses Retail sheds Exhibition spaces Sports arenas and centres Logistics and distribution facilities 	The largest Solarspot system in the range, with each unit capable of lighting areas of up to 95 sqm. The system ideally suited for lighting large open spaces with high ceilings.	D-90

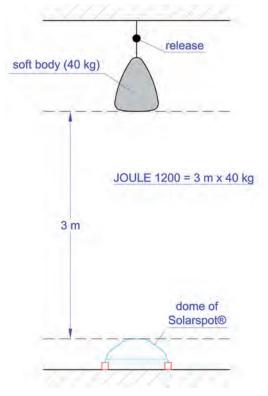
GREAT SOLID EFFICIENT Almost 20m. It resist to 1200Joule. It restitutes more than 55% of the light a vailable with overcast sky







ANTICHOC TEST 1200 JOULE





Installations in industrial



and commercial buildings

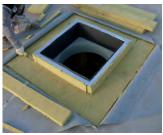
EUROSPED, Italy, 4600 sq.m. lighted by Solar-work lamp kit: N. 105 D650 - N. 6 D530 - N. 5 D375 (2001-2002)

Giannino Distribuzione spa, Italy 18.000 sq.m. lighted by Solar-work lamp kit N. 580 D650 (2006)

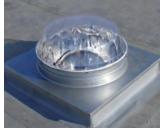








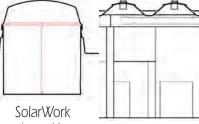
Square and isolated lifting bearing



Square flashing installed on the bearing (Tesco - 2009)



Bearing and square-based flashing with cylindrical flue and transom flashing (Massalengo school 2009)



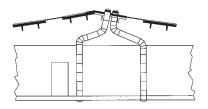
SolarWork lamp kit

Installation examples





N. 14 SOLARSPOT 650, of very complex configuration, made of 22 tubular sections, light 560 sqm of the enlarged workshop FRE.TOR in Puos d'Alpago, Belluno (Italy). (2001)









Hungary - Tesco Supermarket Surface : 3200 mq n° 120 SOLARSPOT D900 L= 60 cm



Various Installation examples













Round and square diffusers



round vision in transparent or pearled acrylic, or in polycarbonate, with ceiling ring, available for D-250-375-530.



(25DR10N+25DTVN) (38DR10N+38DTVN) (25DR12NP+25DTNPOV)(38DR12NP+38DTNPOV)

lamp VISION Fleur in transparent acrylic available for D530 e 650



53DCNPOV 65DCNPOV

Transition box RT60R without frame and with square diffuser, radial Fresnel lens available for D375-530



38RT60R + 53DQL57 53RT60R+53DQL57

round in prismatic acrylic with ceiling ring, available for D-250-375-530.



(25DR10N+25DTPN) (38DR10N+38DTPN) (53DR10N+53DTPN)

round VISION in polycarbonate with ceiling ring in polycarbonate available for D530



round in pearled acrylic with ceiling ring,

available for D-250-375-530

(25DR10N+25-1DTPN) (38DR10N+38-1DTPN) (53DR10N+53-1DTPN)

lamp VISION Fleur in pearled or prismatic acrylic, available for D530 e 650



53-1 DCNACPV 65-1 DCNACPV # 53 DCNACPV 65 DCNACPV 90 DCNACPV

Transition box with frame and square diffuser, radial

Fresnel lens (available for D250, 375, 530 e 650)



(53DR12NP+53DTNPOV)



38RT40R+38DQL3 25RT30R+25DQL30 # 38RT66R+65DQL59 53RT66R+65DQL59 65RT66R+65DQL59

Lamp, radial Fresnel lens with metal finishing frame, lacquered grey or white (available for D250, 375, 530, 650, 900)



65DCNLEF + 65GEDAL15 + 65GISAL15



With electrical accessories

Solar-Dimmer™

Controls of the amount of light by the ease of an electric switch; negligible lost of light when Dimmer open (<6%); available for all standard diameters

LEDSOLARSPOT®

For architects and building designers needing to provide daylight solutions with guaranteed minimum light levels



D650

D900

Available for standard diameters 250-375-530-650

D530

D375

D250





Solar-Fan[™] Areas ventilation

Solar-ATTIC™

Ideal to enlighten garrets and lofts



SOLAR-WALL[™]

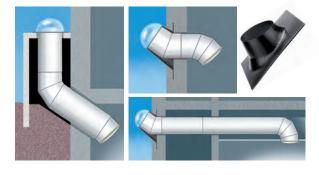
When areas can be reached only from ground and wall. Solarspot[®] can convey light horizontally and...uphill thanks to angle adapters and tubes made of



For the large surfaces of new buildings and restyled ones

SOLAR-WORK™

traditional or lamp, provides natural light, but not heat

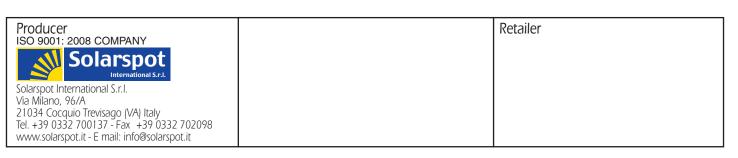


Standard

Lamp kit



3 November 2009, Solar Project Srl and Energo Project Srl merged in SOLARSPOT INTERNATIONAL SRL.





(Patented in Europa e USA)

