

**DEPLOSUN**

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**FLAT TOP VEHICLES**

**DEPOSUN LIGHT PIPES** it's a new system that captures daylight through domes located in the building roofs and transports it many meters inside using a high reflectivity aluminium tube. Bring natural light to black areas o rooms without windows like bathrooms, basements, offices, industrial buildings such as warehouse, manufacturing areas, or subway stations.

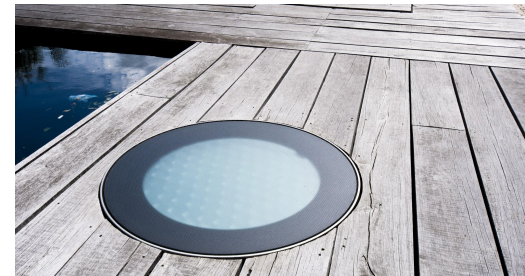
**FINAL RESULT** is brightening areas, full of life thanks to sun light. Transform completely black areas and reduce up to 45%-50% lighting energy consumption using free and sustainable natural energy.

**SISTEMA MODULAR**

**DEPOSUN SYSTEMS** are a modular concept where each customer can purchase a complete kit or independent modules to be integrated in their own constructive light pipe solutions. That means that any light pipe manufacturer could use our Glass.top and Flat Top introduce glass advantages in their products as a product upgrade. Also our portfolio of Diffusers , could be adapted to any system.

**1. DEPOSUN FLAT TOP DOMES WITH DEPLOCELL TECHNOLOGY**

Manufactured in "triple laminated glass" technology with isolation air chamber A Non Slip treatment in the external tempered side glass will guarantee to pass any regulations in the world. Walk through dome levelled to roof deck preventing water penetration, due to special design. Reflective grid with Deplocell technology manufactured in high reflective aluminum that captures and redirects sun rays inside the pipe increasing performance. The special shape and design maximizes winter performance (lowest rays) and minimizes summer performance protecting from excessive heat stroke.



**2. REFLECTIVE PIPE DEPLO DUCT**

Due to a superficial silver treatment SILVER-PLUS 98% ( 98% super-reflective factor as per DIN5036) , they could transfer sun light up to 21 m. Is the only one in the market to be a sold reflective material and not a laminated polymer sheet, so we could guaranty a better stability to sun exposure during all life of the tube. The manufacturer gives 25 years of guarantee.

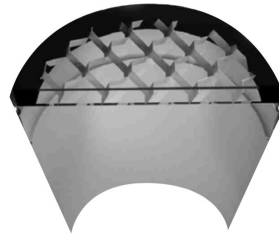


**3. DIFFUSERS DEPLO DIF**

Deliver crystal clear and homogeneous daylight with the radiance of natural light. Selective UV rays protection in order to preserve inside materials from degradation. A simple design harmonizes with any decoration. Call us from special features.



DEPLOCCELL

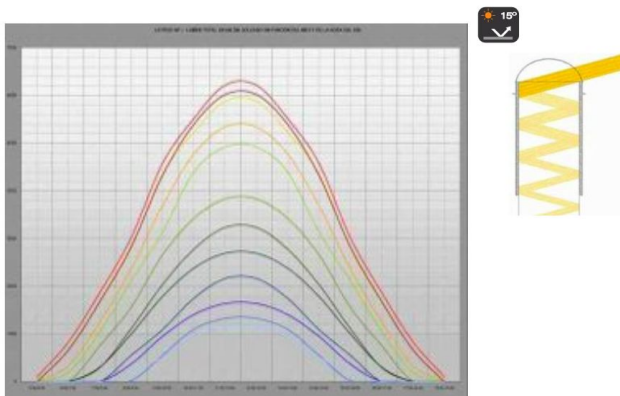


Reflective grid **Deplocell** is a Patented System that captures sunlight and redirects sun rays inside the pipe, increasing up to doubling performance comparing to traditional sun pipes in the market.

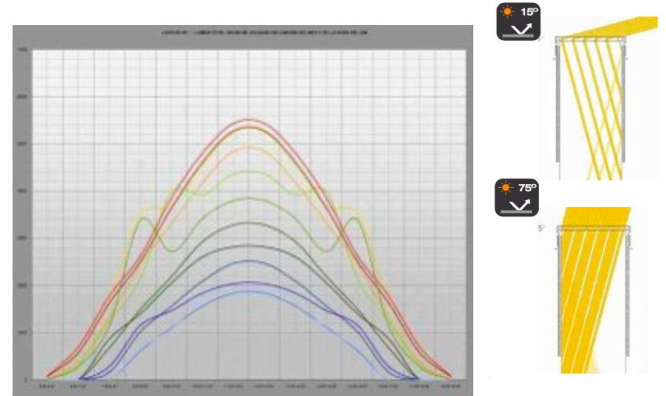
Reflective grid DEPLOCCELL is factory mounted inside isolation air chamber from the double glazed device, being absolutely protected from dust and scratch. In conventional light pipes domes, low rays (winter), they have to go through many reflections inside the pipe, and decreases performance.

Patented reflective-grid is manufactured in **aluminum Silver-Plus** 98% with a superficial silver treatment up to 98% as per DIN5030, with 25 years guaranty. Due to be a solid reflective material, we could guaranty a better stability to sun exposure.

TRADITIONAL DOME



DEPOSUN DOME



In conventional domes, low rays (winter), hit inside the aluminum pipe at a steep angle causing rays to go through multiple bounces at the end of the tube, of course this decreases their performance.

Deplosun domes with Deplocell technology redirect sun rays inside the pipe reducing reflections inside, increasing up to doubling the amount of light comparing with traditional sun pipes in the market.

GRID INSTALLATION

When installing Deplosun Flat Top, the **Deplocell** grid should be south oriented to maximize sun capture during all day.



Our domes and skylights are the only market made double glazed with internal anti-condensation air chamber, insulation. The hardened exterior of his face gives him a mechanical resistance to impact and scratch, hard to achieve with plastics.

**GLASS DOMES**

	<b>GLASS</b> Double glass Deplosun domes	<b>PLASTIC</b> Monovalve plastic dome
<b>AGING</b>	<p>Glass has not aging process, and their properties get inalterable for years.</p> <p>●●●●●●</p>	<p>It yellows, cracks and loses mechanical properties with years. Chemical agents can accelerate degradation.</p> <p>●○○○○○</p>
<b>SCRATCH RESISTANCE</b>	<p>Glass has a high superficial hardness up 6,5 Mohrs. Will never get scratched or lose it's light properties.</p> <p>●●●●●●</p>	<p>Plastic could be scratched easily when cleaned or manipulated, losing light properties.</p> <p>●○○○○○</p>
<b>ACOUSTIC INSULATION</b>	<p>Very high acoustic isolation due to a double glazed window with air chamber and 100% sealed system. Reach up to 49 dBs.</p> <p>●●●●●●</p>	<p>Very low acoustic isolation because there is only one plastic barrier. Air flows and lets sound come in and out.</p> <p>●○○○○○</p>
<b>TERMAL INSULATION</b>	<p>Deplosun dome with double glazed window, air chamber and 100% sealed system will reach <math>U=2,6 \text{ W/m}^2\text{K}</math>, and is we take into consideration lightpipe could reach <math>1,7 \text{ W/m}^2\text{K}</math></p> <p>●●●●●●</p>	<p>Monovalve dome from 3mm thickness with air flow system will offer very low thermal insulation. Normally up to <math>U=5,4 \text{ W/m}^2\text{K}</math></p> <p>●○○○○○</p>
<b>MECHANICAL LOAD RESISTANCE</b>	<p>Could get up to a 1000kg load resistance.</p> <p>●●●●●●</p>	<p>Could not be used in walkable areas due to security reasons (could break)</p> <p>●○○○○○</p>

**DEPLOCCELL GRID**

Deplosun technology in high reflective aluminium captures and redirects sun rays inside the pipe, increasing the performance. It's the only system in the market without a sun tracking mechanical system that maximizes sun light with 3 specially designed and oriented plans for morning, midday and afternoon rays. It's design maximizes performance in winter (when low rays) and decreases it in summer preventing a heat stroke.

**ALUMINIUM PIPES**

Due to a superficial silver treatment SILVER\_PLUS 98% ( 98% super-reflective factor as per DIN5036), they could transfer sun light up to 21 m. Is the only in the market to be a sold reflective material and not a laminated polymer sheet, so we could guaranty a better stability to sun exposure during all live of the tube (25 years guaranty)

	NON-SLIP PLUS		
	300	550	760
<b>EXTERNAL DOME DIAMETER</b> (mm) Ø A	420	760	970
<b>INTERNAL DOME DIAMETER</b> (mm) Ø n	320	570	780
<b>GLAZING DESIGN</b>	TA8- TS8 - T8 /24/ F3 -F3	TA( - TS12 - T15 /24/ F4 F4	TA10 - TS15 - T15 - /24/ F4 - F4
<b>LOCAL LOAD</b> (Q)	1000 kg	1000 kg	1000 kg
<b>DISTRIBUTED LOAD</b> (q)	500 kg/m <sup>2</sup>	500 kg/m <sup>2</sup>	500 kg/m <sup>2</sup>
<b>SCRATCH RESISTANCE</b>	6,5 Mohrs	6,5 Mohrs	6,5 Mohrs
<b>THERMAL TRANSMITTANCE</b> (U)	2,6 w/m <sup>2</sup> -k	2,6 w/m <sup>2</sup> -k	2,6 w/m <sup>2</sup> -k
<b>LIGHT TRANSMISSION</b> (TUV) (EN 410)	Winter = 0,65 Summer = 0,46	Winter = 0,65 Summer = 0,46	Winter = 0,65 Summer = 0,46
<b>SOLAR FACTOR</b> (g)	Winter = 0,52 Summer = 0,40	Winter = 0,52 Summer = 0,40	Winter = 0,52 Summer = 0,40
<b>ULTRAVIOLET TRANSMISSION COEFFICIENT</b> (TUV)	0,01	0,01	0,01
<b>SOUND ATTENUATION</b> (R <sub>w</sub> )	49dB	49dB	49dB
<b>LAMINATED SECURITY GLASS</b>	yes	yes	yes
<b>INCREASE OF PERFORMANCE (DEPLOCCELL TECH)</b>	INTEGRATED (195%)	INTEGRATED (195%)	INTEGRATED (195%)
<b>SLIP RESISTANCE</b> (UNE ENV 12633:2003) (Rd)	C3 (56)	C3 (56)	C3 (56)
<b>WALKABLE</b>	VEHICLE	VEHICLE	VEHICLE

**LEGEND**

- U** - Thermal Transmittance a (The lower, better isolation)
- R<sub>w</sub>** - Sound Attenuation ( ISO 140-3). (The higher, better sound attenuation)
- TUV** - Ultraviolet Transmission Coefficient (The lower, better protection)
- A** - Non Slip Treatment



