

CRISLAN® /

## California Solar Control

ENERGY BREAKDOWN OF DIRECT SUNLIGHT  
DISTRIBUCIÓN ENERGÉTICA DE LA RADIACIÓN SOLAR DIRECTA



San Jose Civic Center  
San Jose (CA) 2005  
Architect: Richard Meier & Partners

California  
Solar Control

## Definition

Tight bends are getting more common in singular architecture. It is when we come across glass structures with small radii along with solar energy efficient requirements that the Crislan® California plays a unique role.

Crislan® California is a curved double-glazing with a solar control coating laminated on the outboard of the IGU. The product is based on the high performing XIR 72-47 interlayer. Its main feature is the way in which it selectively controls infrared solar energy, while retaining high visible light transmission. It is a soft coating that comes on an interlayer but not already applied on the glass, fact that opens a wide range of possibilities:

- **Type of glass:** we can select not only the brand but also the thickness and colour of the glass
- **Thickness:** if the mechanical requirements are very demanding, we can decide to use any glass thickness desired (15 or 19mm for instance) where most of the coatings of the market are not available
- **Tight radius:** the glass will be slumped without any coating as it will be applied laminating the XIR 72-47 afterwards, hence coating is not suffering the temperature of the bending process resulting in a higher optical quality of the end product

## Definición

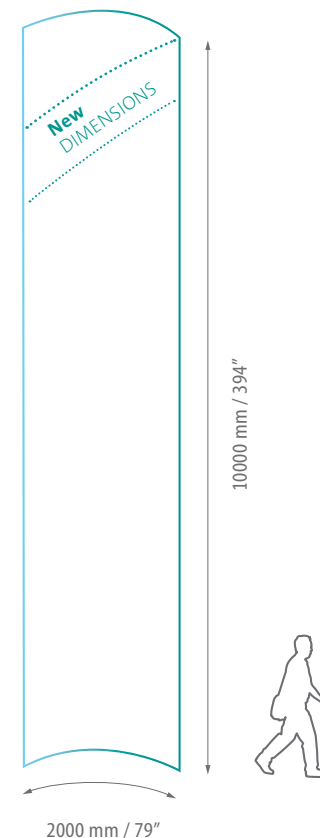
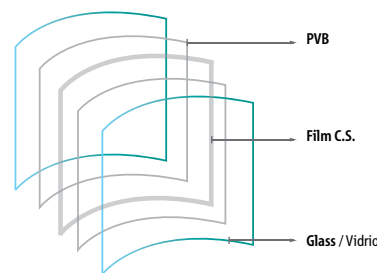
Cada vez es más frecuente encontrarnos con curvas exigentes en arquitectura singular. Crislan® California nos da su máximo rendimiento en diseños con radios cerrados dónde el proyecto requiere eficiencia en el control solar.

Crislan® California es un doble acristalamiento con un vidrio laminado de control solar en el conjunto exterior. La tecnología usada se basa en la lámina de altas prestaciones XIR 72-47. Su principal cualidad consiste en controlar selectivamente la energía solar infrarroja, lo que permite una alta transmisión luminosa. Es una capa de ahorro energético que viene aplicada sobre una lámina y no directamente sobre vidrio lo que abre un amplio abanico de posibilidades:

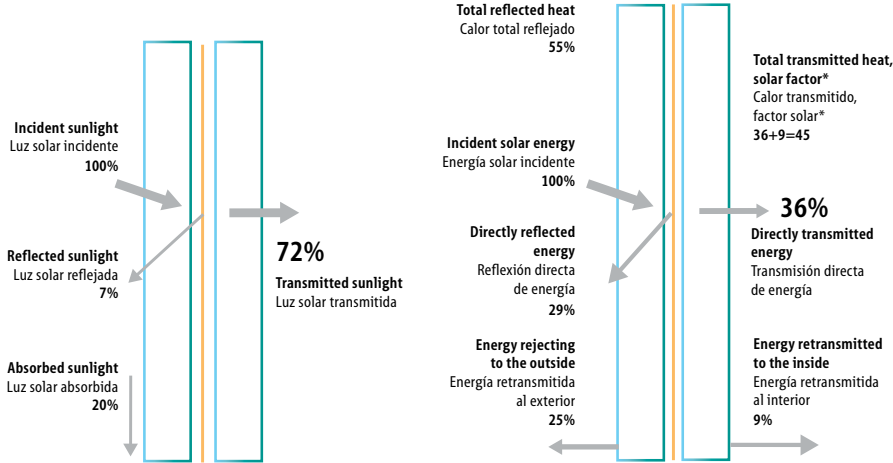
- **Tipo de vidrio:** podemos escoger no sólo la marca pero también el espesor y color de vidrio a utilizar
- **Grosor:** en el caso de altas exigencias mecánicas, tenemos la libertad de poder escoger el espesor de vidrio que más nos convenga sin tener que estar restringidos por los espesores de los vidrios de control solar que el mercado nos ofrece
- **Radios pequeños:** el hecho que la capa XIR 72-47 no está en el vidrio nos permite obtener una calidad óptica sin igual ya que la capa de control solar no sufrirá el proceso de curvatura a alta temperatura, y se laminará una vez el vidrio ya esté curvado

## Dimensions / Dimensiones

For larger dimensions, please contact Cricursa  
Para dimensiones superiores, consultar con Cricursa



California 72-47 Laminated



\* The solar factor of glazing is the ratio of the quantity of heat entering a given area through the glazing to the intensity of the incident solar radiation. It is equal to the sum of the solar energy directly transmitted to the interior plus the energy released to the interior by the glazing as a result of the heat building up in that glazing through energy absorbtion

\* El factor solar de un acristalamiento es la relación entre la cantidad de calor que penetra en el local a través de dicho acristalamiento y la intensidad de la energía solar radiante incidente. Es igual a la suma de la energía solar que entra por transmisión directa y la energía cedida por el acristalamiento al ambiente interior a causa de su calentamiento por absorción energética

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Performance data / Características energéticas

CRISLAN CALIFORNIA laminated (film 72-47): 6 mm (1/4") laminated outboard lite, 12 mm (1/2") airspace, 6 mm (1/4") monolithic inboard lite  
CRISLAN CALIFORNIA laminado (film 72-47): 6 mm laminado exterior, 12 mm cámara, 6 mm monolítico interior

| Glass Type / Producto                       | Thickness |     | Light transmit. visual | Solar transmit. solar | Visual reflect. Refl. visual |      | Solar reflect. Refl. solar | U-Value BTU/(hr*ft²**F) | K-Value W/(m²*K) | Shading coeff. Coef. sombra | Solar heat gain coeff. Factor solar | UV trans. Trans. UV |
|---------------------------------------------|-----------|-----|------------------------|-----------------------|------------------------------|------|----------------------------|-------------------------|------------------|-----------------------------|-------------------------------------|---------------------|
|                                             | Grosor    |     |                        |                       | Ext.                         | Int. |                            |                         |                  |                             |                                     |                     |
|                                             | IP*       | SI* | %                      | %                     | %                            | %    | %                          | IP*                     | SI*              |                             |                                     | %                   |
| Clear Lami / Float Laminado (No CALIF)      | 1"        | 25  | 79                     | 60                    | 15                           | 15   | 12                         | 0.48                    | 2.73             | 0.80                        | 0.69                                | ~1.0%               |
| Low-iron / Extraclaro                       | 1"        | 25  | 69                     | 38                    | 13                           | 15   | 31                         | 0.48                    | 2.72             | 0.49                        | 0.42                                | 0.02%               |
| Clear / Float                               | 1"        | 25  | 64                     | 31                    | 13                           | 15   | 26                         | 0.48                    | 2.72             | 0.45                        | 0.38                                | 0.02%               |
| Bajo em, capa dura / Pyrolytic Low-e Clear  | 1"        | 25  | 60                     | 29                    | 13                           | 17   | 26                         | 0.35                    | 1.97             | 0.40                        | 0.35                                | 0.02%               |
| Low-reflect Low-iron / Antirefl, extraclaro | 1"        | 25  | 56                     | 24                    | 11                           | 11   | 26                         | 0.29                    | 1.66             | 0.38                        | 0.33                                | 0.01%               |
| Green body-tinted / Verde en masa           | 1"        | 25  | 60                     | 27                    | 11                           | 14   | 25                         | 0.48                    | 2.72             | 0.40                        | 0.34                                | 0.01%               |
| Green body-tinted / Verde en masa           | 1"        | 25  | 55                     | 23                    | 11                           | 14   | 24                         | 0.48                    | 2.72             | 0.36                        | 0.31                                | 0.01%               |
| Blue body-tinted / Azul en masa             | 1"        | 25  | 57                     | 23                    | 10                           | 14   | 24                         | 0.48                    | 2.72             | 0.36                        | 0.31                                | 0.02%               |
| Bronze body-tinted / Bronce en masa         | 1"        | 25  | 48                     | 24                    | 9                            | 13   | 23                         | 0.48                    | 2.72             | 0.38                        | 0.33                                | 0.01%               |
| Grey body-tinted / Gris en masa             | 1"        | 25  | 43                     | 22                    | 9                            | 13   | 23                         | 0.48                    | 2.72             | 0.36                        | 0.31                                | 0.02%               |

All performance information is based on Southwall Technologies' specifications and is calculated using Lawrence Berkley Laboratories Window 4.1 spectral data

Datos basados en especificaciones técnicas de Southwall Technologies obtenidos usando Lawrence Berkley Laboratories Window 4.1 resultados espectrofotométricos