



# 装饰玻璃

Decorative glass

CRIDECOR® /

丝印玻璃 Screen printing

点阵图案丝印玻璃 Chromascreen

数码印刷 Digital printing

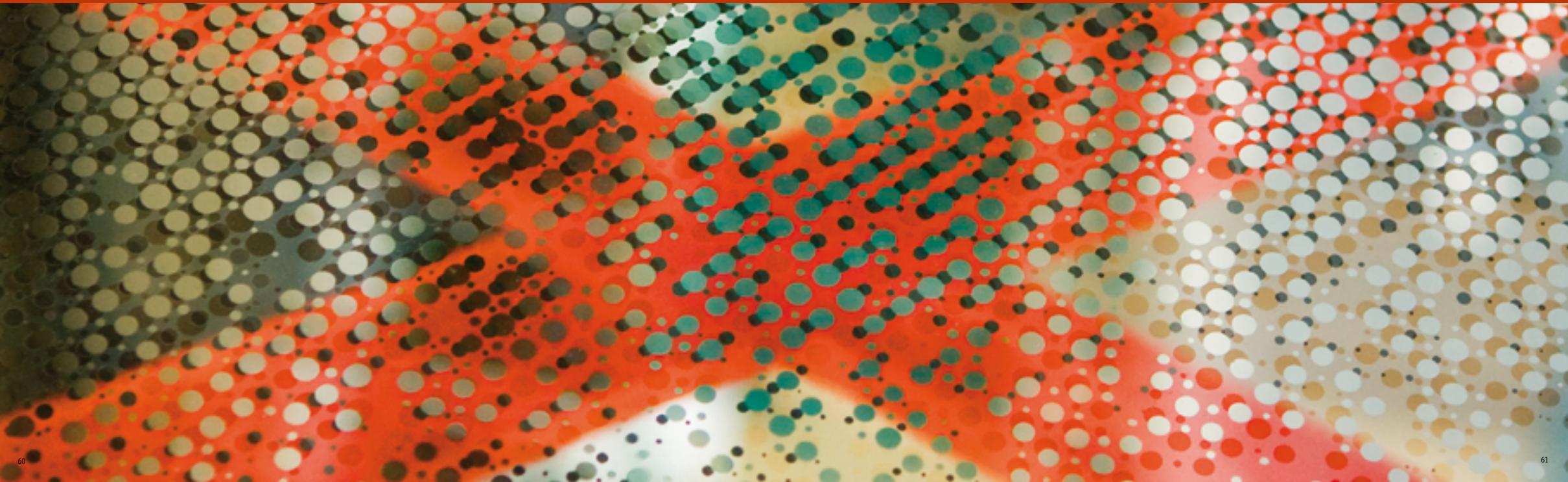
彩色夹胶片 Color Vanceva®

夹丝玻璃 Metalscreen



装饰玻璃 Decorative glass

CRIDECOR® /  
丝印玻璃  
Screen printing





## 产品简介

Cridecor®丝印玻璃是彩釉曲面玻璃, 通过在平板玻璃上进行丝网印刷形成图案。在平板玻璃板的一侧表面一次性或分批使用一种或多种颜色将全片彩釉(用于窗间墙)或定制图案丝印到玻璃上。

釉料彻底干燥后方可进行弯曲(退火、回火或热强化)。玻璃板在600°C左右弯曲, 釉料玻化成为玻璃的一部分, 与玻璃永久结合。

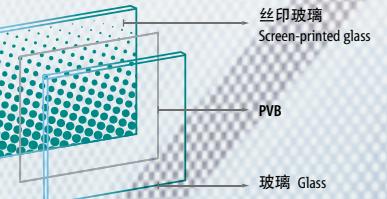
在对平板玻璃表面进行釉料处理时, 玻璃必须已经钢化或半钢化; 但在曲面玻璃中, 可以对退火曲面玻璃直接进行釉面处理。在玻璃坍落过程中, 温度达600°C时加入釉料使其玻化。

## Definition

Cridecor® is a curved enamelled glass where the frit pattern is applied by means of a silkscreen on a flat glass ply. The process consists of screen-printing a bespoke pattern or simply full frit (spandrel applications) on one of the surfaces of the flat glass panel, applying one or more passes, using one or more colours by repeating the process.

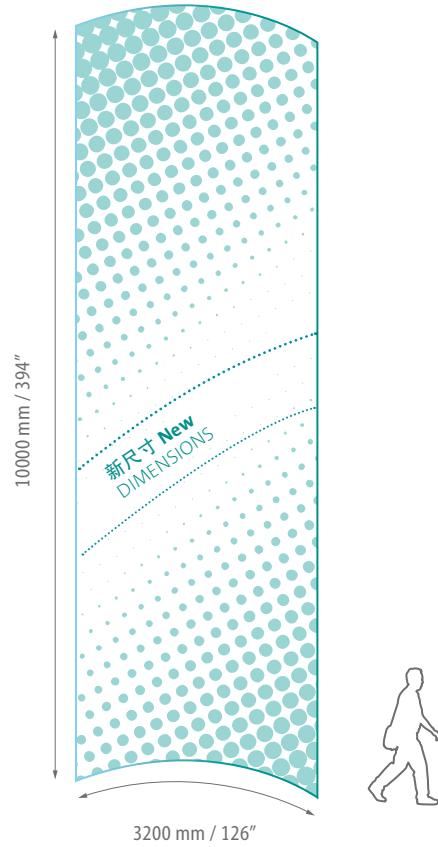
Before proceeding with the bending (annealing, tempering or heat strengthening) the paint has to be dried out. With the bending of the panel at around 600°C, the ceramic frit gets vitrified becoming now part of the glass itself allowing for silicone structural glazing on this treated surface.

In curved glass, unlike to what happens in flat glass where toughening or heat strengthening is a must to bake the ceramic frit onto the glass surface, we can have curved annealed panel enamelled. During the slumping process we are submitting the frit to high temperature (600°C) which vitrifies the frit applied.

丝印玻璃  
Screen printing

胡安卡洛斯国王医院 Hospital Rey Juan Carlos  
西班牙马德里莫斯托莱斯 2012 Móstoles (Madrid), Spain 2012  
建筑师 Architect: Rafael de La-Hoz Arquitectos

## 尺寸 Dimensions



M L A T

丝印玻璃  
Screen printing

邦德街40号公寓楼 40 Bond, Apartment Building  
美国纽约2006 New York, USA 2006  
建筑师 Architect: Herzog & de Meuron

丝印玻璃  
Screen printing

## 产品特点

- 多种颜色可选(推荐使用RAL色卡)
- 可选用各种基层(透明浮法玻璃、低铁玻璃和有色玻璃)
- 设计自由度高
- 丝印质量精良
- 可制成退火、钢化和半钢化曲面玻璃
- 钢化和半钢化曲面玻璃在凹面一侧上釉
- 退火曲面玻璃可在任意面上釉
- 最大尺寸: 6000x3000mm  
(欢迎垂询定制更大尺寸产品)

## Characteristics

- Extensive range of colours available (preferable RAL chart to be used)
- Any substrate (clear float, low iron or body-tinted glass)
- Design freedom
- Highest quality and precision in silk-screen production
- Available in annealed, toughened and heat strengthened curved glass.
- Curved toughened & heat strengthened: frit on concave surface
- Curved annealed: frit on any surface
- Maximum dimensions: 6000x3000mm (for larger sizes contact Cricursa)

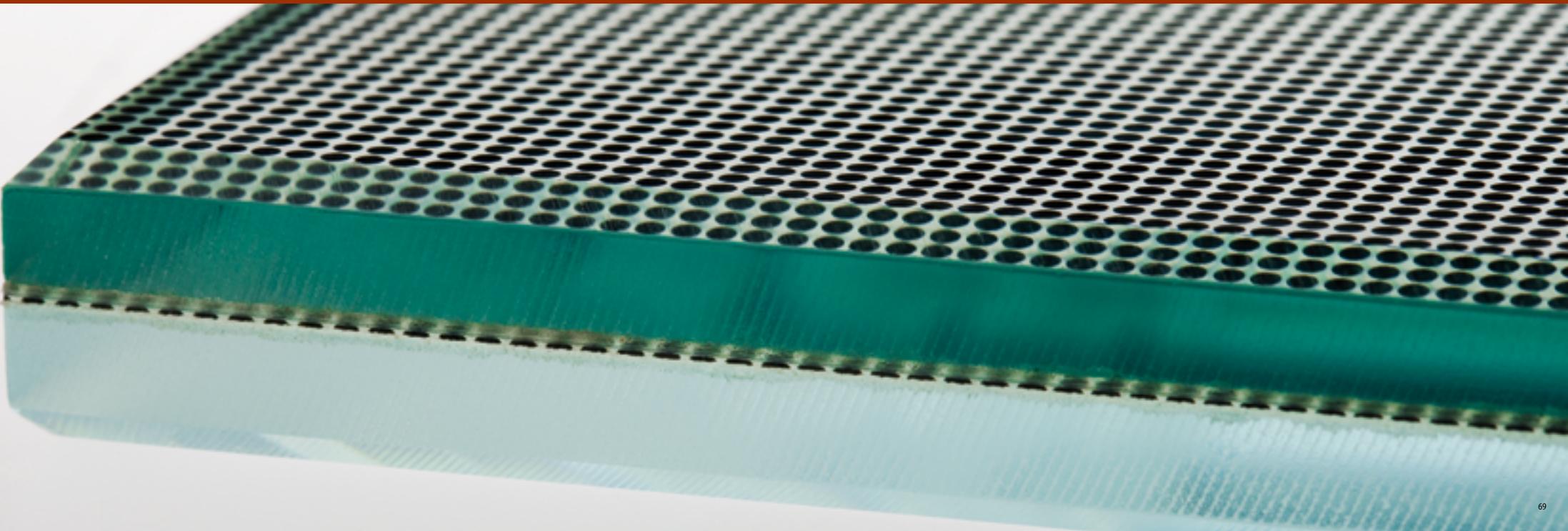
## 彩釉面 FRIT FACE

退火曲面玻璃可在任意面上釉  
Curved annealed: enamel on any face, either concave or convex

钢化和半钢化曲面玻璃只能在凹面一侧上釉  
Curved toughened or HS: enamel always on concave surface



玻璃 glass  
彩釉面 frit face



▼ 装饰玻璃 Decorative glass

CRIDECOR® /

**Chromascreen**  
点阵图案丝印玻璃



## 产品简介

Cridecor®Chromascreen点阵图案丝印玻璃是带有清晰的双重丝印黑白点状图案的建筑用装饰玻璃。

该产品的工艺难点在于使用最先进的设备实现双重丝印的图案完美匹配。

Cridecor®Chromascreen点阵图案丝印玻璃可制成：

- 钢化或半钢化平板玻璃
- 退火、钢化或半钢化曲面玻璃，  
热处理方式取决于不同项目的具体要求。

在对平板玻璃的表面进行釉料处理，玻璃时必须为钢化或半钢化；但在曲面玻璃中，可以对退火曲面玻璃直接进行双重釉面处理。在玻璃弯曲过程中，在温度达600°C时进行黑白点状图案丝印。

## Definition

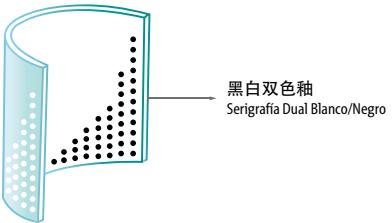
Cridecor® Chromascreen is a decorative architectural glass with a dual screen-printed dot pattern, black on white with perfect registering.

The complex part of its manufacturing method lies on achieving a perfect matching of the dual printing process which becomes feasible thanks to the use of state-of-the-art silk screening equipment.

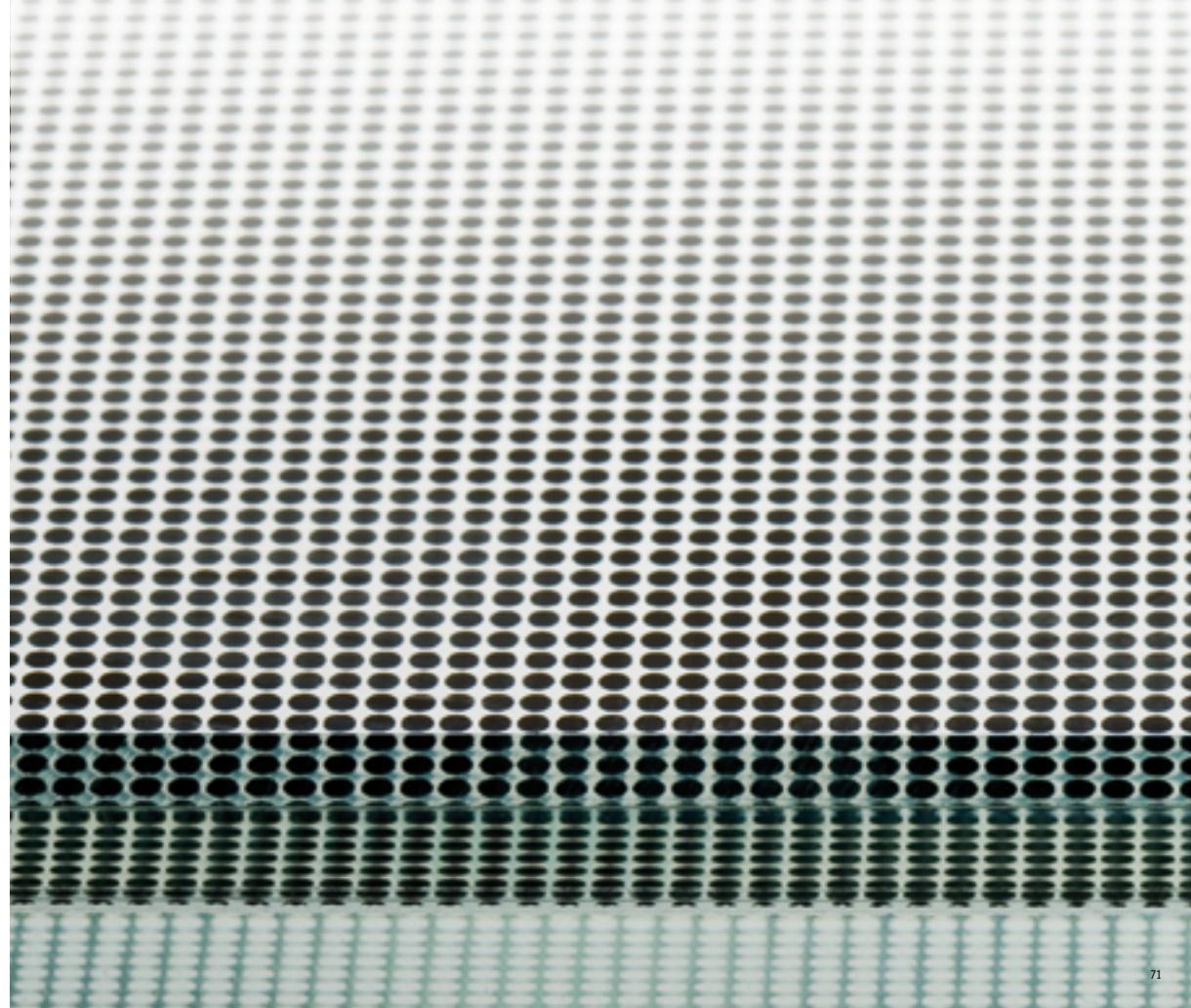
Cridecor® Chromascreen is available in the following glass types:

- Flat toughened or heat strengthened
- Curved annealed, toughened or heat strengthened. In this case, the thermal treatment will depend on the project specific requirements

In curved glass, unlike to what happens in flat glass where toughening or heat strengthening is a must to bake the ceramic frit onto the glass surface, we can have a dual frit in a curved annealed make up. The bending process we are submitting the black & white printed dots to, at around 600°C, takes care of the baking of the frit.



## Chromascreen 点阵图案丝印玻璃





## 光学、 阳光控制和热学性能

- 图案单向可见
- 日光透射率34%
- 遮阳系数(SC): 0.43
- 太阳能得热系数(SHGC): 0.38  
(使用日光控制涂层可进一步提升性能)
- U值\*:
  - 夹胶玻璃: 5.7W/(m<sup>2</sup>\*K); 英制单位 0.98BTU/(hr\*ft<sup>2</sup>\*K)
  - 中空玻璃: 2.8 W/(m<sup>2</sup>\*K); 英制单位 0.48BTU/(hr\*ft<sup>2</sup>\*K)
  - IGU + Low-E + 氩气: 1.0 W/(m<sup>2</sup>\*K);  
英制单位0.17BTU/ (hr\*ft<sup>2</sup>\*K)

\*使用公制单位时, U值定义为每平方米面积和每摄氏度温差的热能传送瓦数。将公制单位U值除以5.678即为英制单位U值。

## General Optical, Solar and Thermal Properties

- One-way vision effect
- Daylight transmittance: 34%
- Shading coefficient (SC): 0.43
- Solar factor (SHGC): 0.38 (can be improved by adding a solar control coating)
- U-Value\*:
  - Laminated glass: 5.7 W/(m<sup>2</sup>\*K); Imperial 0.98BTU/(hr\*ft<sup>2</sup>\*K)
  - Insulated glass: 2.8 W/(m<sup>2</sup>\*K); Imperial 0.48BTU/ (hr\*ft<sup>2</sup>\*K)
  - IGU + Low-E + Argon: 1.0 W/(m<sup>2</sup>\*K); Imperial 0.17BTU/ (hr\*ft<sup>2</sup>\*K)

\* Metric U-Values / factors are defined as Watts per square meter per degree Celsius. To convert metric U-Values to Imperial inch-pound U-Values, divide by 5.678

韩国工业联合会(FKI)  
FKI-Federation of Korean Industries  
韩国首尔 2014 Seoul, Korea 2014  
建筑师 Architect: Adrian Smith+Gordon Gill

## Chromascreen 点阵图案丝印玻璃



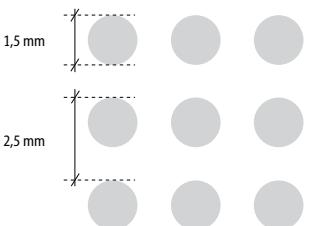


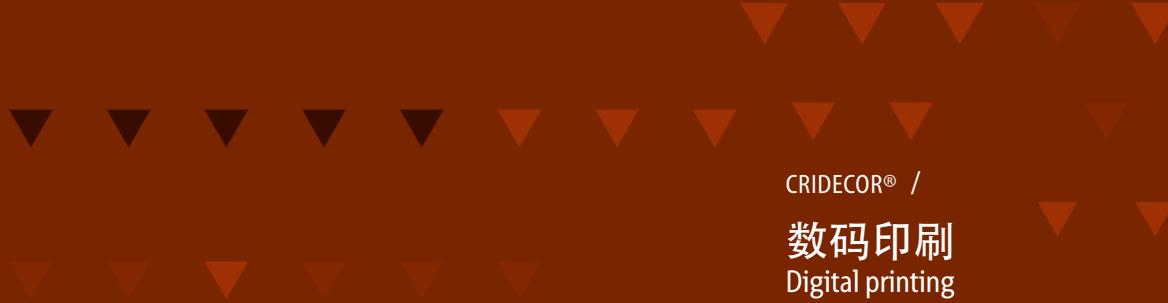
## 产品特点

- 常规产品为丝印黑白点阵，可考虑使用其他颜色
- 直径1.5mm；间隔1mm
- 可选择任何基材(透明浮法玻璃、超白或镀色玻璃)，超白玻璃的效果最佳
- 适用于下列曲面和平面玻璃：
  - 彩釉于退火曲面玻璃的第二表面(不论凹面或凸面)。
  - 彩釉于钢化或半钢化曲面玻璃的凹面
  - 钢化和半钢化平面玻璃
- 夹层：1.52mmPVB及SentryGlas®夹层。
- 玻璃厚度：6mm及以上。夹胶玻璃建议两层玻璃厚度相同。
- 可制成各种形状
- 最大尺寸：6000x3000mm (欢迎垂询定制更大尺寸产品)

## Characteristics

- Basic product consisting of black & white screen-printed dot matrix. Other colour combinations can be considered
- 1.5mm diameter, spaced 1mm
- Any substrate can be chosen (clear float, low iron or body-tinted glass) whereas the sharpest results are obtained using low iron glass accomplishing the purest whitish appearance when looking from the outside
- Available curved and flat as follows:
  - Curved annealed with frit on the second surface of the glass, being it either convex or concave.
  - Curved toughened and heat strengthened with the frit always on the concave side
  - Flat toughened and heat strengthened
- Lamination: 1.52mm PVB and SentryGlas® interlayers.
- Glass thickness: minimum 6mm. In lamination, advisable for both lites to be of the same thickness
- Shapes: feasible
- Maximum dimensions: 6000x3000mm  
(for larger sizes contact Cricursa)

圆点尺寸  
Geometry of dotsChromascreen  
点阵图案丝印玻璃Iris大厦 Edificio Iris  
西班牙马德里2003 Madrid, Spain 2003  
建筑师 Architect: Gabriel Allende



CRIDECOR® /

数码印刷  
Digital printing





## 产品简介

可在两种材料上进行数码印刷：

- PVB
- 玻璃

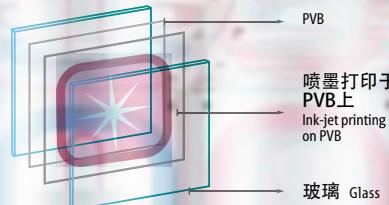
Cridecor®PVB数码印刷产品可在夹胶安全玻璃上实现大胆的设计和逼真的图像。使用高分辨率的喷墨打印机和特制的抗紫外线墨水在PVB上打印，可完美保留图像细节。

## Definition

Two types of digital printing are offered:

- Printing on PVB
- Printing on glass

Cridecor® PVB Printing enables the production of dramatic designs and lifelike photographic images in a laminated safety glass. Transparent Polyvinyl butyral is printed using high-resolution ink jet printers with specially formulated UV-resistant inks. This technology is particularly useful when reproducing the subtle differences of a graphic image.



## 数码印刷 Digital printing

## 产品特点

- 可用于单层夹胶玻璃和双层玻璃
- 为获得最佳效果，建议使用退火玻璃。
- 抗紫外线能力强
- 用于室内时可使用白色墨水
- 推荐的图片质量: 300dpi, CMYK或黑白；全尺寸(1:1)
- 推荐的图片格式:.TIFF、.JPG、.EPS、.AI
- 出血边位10mm(3/8")
- 夹胶片尺寸: 2400x10000mm

## Characteristics

- Available in single laminated glass or double glazing
- To accomplish best results, it is advisable to use annealed glass
- High resistance to UV rays
- White ink can also be offered although just for interior applications
- Recommended artwork quality: 300dpi, CMYK or b/w; full size (1:1)
- Preferred formats: .TIFF, .JPG, .EPS, .AI
- 10mm (3/8") bleed
- Interlayer size: 2400x10000mm



## 产品简介

Printing Cridecor® 玻璃数码印刷产品彻底改变了建筑用及装饰性釉面平板和曲面玻璃, 提升了生产精度和速度, 扩大了颜色、图案和形状的选择范围, 摆脱了传统丝印工艺的不足。

回火或退火过程让墨水烧结为玻璃的一部分, 处理后的玻璃可以进行夹胶和弯曲, 产品效果理想。

## 产品特点

- 可设计任何图案, 使用任何颜色
- 印刷精准清晰
- 使用的墨水是传统丝印中使用的不透明墨水, 具有光学和日光特性
- 设计中涉及不同图案时的最佳选择
- 釉面:
  - 退火曲面玻璃: 任意面
  - 钢化/半钢化曲面玻璃: 通常位于凹面, 新研发的釉料可覆于凸面
- 最大尺寸: 10000x3000mm

## Definition

Cridecor® Glass Printing has revolutionised the architectural and decorative enamelled glass, both flat and curved, opening new horizons in the precision of production, speed, colour range, patterns, shapes, forgetting about the known drawbacks of the traditional silk-screening process.

The inks used become part of the glass during the tempering or annealing process, enabling lamination and bending feasible getting outstanding results.

## Characteristics

- Total freedom in pattern design and colour
- High precision and sharp printing
- Opaque ink, with light and solar properties as the ones used in traditional screen-printing
- Perfect solution for applications with changing patterns
- Frit face:
- Curved annealed: any surface
- Curved toughened/heat strengthened: generally on concave surface although new frits have been developed to be applied on convex face
- Dimensions up to 10000x3000mm

## 数码印刷 Digital printing

Rex大厦 Edificio Rex,  
西班牙潘普洛纳 2006 Pamplona, Spain 2006  
建筑师 Architect: Resano Soler Arquitectos SL





CRIDECOR® /

Color Vanceva®  
彩色夹胶片





## 产品简介

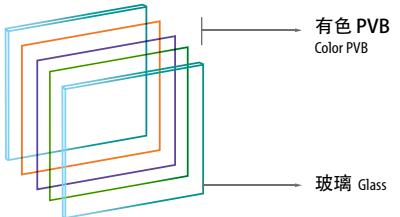
Cridercor® Color Vanceva®是能够实现多种颜色和设计的夹胶安全玻璃。多个0.38mm (0.015")厚的PVB层可组合出超过600种透明及半透明的颜色。

Cridercor® Color Vanceva®的技术性能(隔音、防紫外线和安全性能)与CRICURSA的标准夹胶玻璃同样出色。该产品中也可加入印有图案的聚酯夹层, 实现各类创意设计。

## Definition

Cridercor® Color Vanceva® is a safety laminated glass with a broad range of color and design possibilities. The combination of different layers of 0.38 mm (0.015") thick PVB, creates a palette of more than 600 colors, both transparent and translucent.

Cridercor® Color Vanceva® offers the same excellent technical performance (acoustical attenuation, UV protection and safety characteristics) of that of Cricursa's standard laminated glass. It is also feasible to insert a pattern-printed polyester layer, resulting in a wide variety of creative and unique designs.

Color Vanceva®  
彩色夹胶片



装饰玻璃 Decorative glass

CRIDECOR®

L I T A

Color Vanceva®

彩色夹胶片 Color PVB lamination

## 产品特点

### 产品多样性

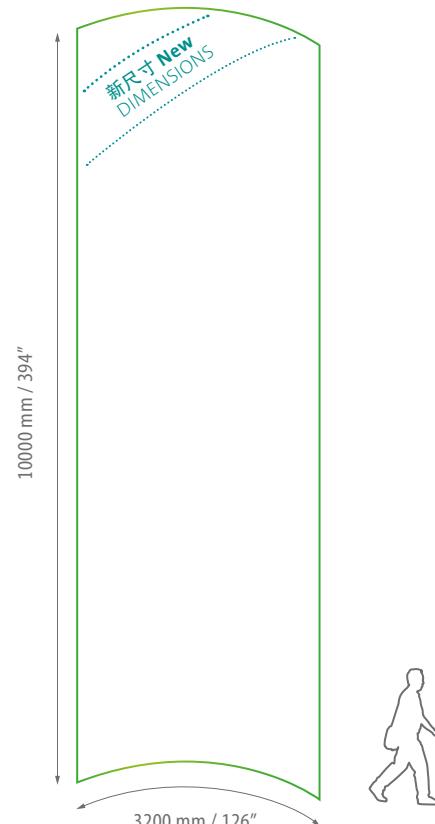
普通浮法玻璃、超白玻璃、夹层玻璃、中空玻璃、退火玻璃、半钢化玻璃、钢化玻璃，平面和曲面皆可。

## Characteristics

### Manufacturing possibilities

Regular float, extra-clear, laminated, double-glazed, annealed, heat-strengthened, tempered, flat and curved.

如欲订购更大尺寸, 请联络Cricursa  
For larger dimensions, please contact Cricursa



Woermann大楼 Torre Woermann,  
拉斯帕尔马斯(Las Palmas)2005  
Las Palmas de Gran Canaria, Spain 2005  
建筑师 Architect: Ábalos & Herreros



CRIDECOR® /

**Metalscreen**  
夹丝玻璃





## 产品简介

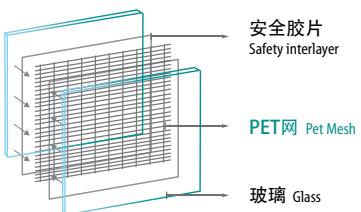
Cridecor® Metalscreen夹丝玻璃是带有聚酯网的新型夹胶安全玻璃，金属网由铝、钛、铜、金等材料制成，采用的最新技术让本系列产品在拥有阳光控制和保护隐私功能的同时兼具优美的外观。

网格外侧是闪亮的金属层，使室外不易看清室内；网格内侧则为黑色，使室内向外看的视野中性舒适。Cridecor®夹丝玻璃中使用的网格孔径为25%-70%，厚度在140-260  $\mu\text{m}$ 之间，设计师可以在截面、透明度和反射等方面发挥创意，实现自己想要的效果。Cridecor®夹丝玻璃节能性能出色，太阳能得热系数为28%-62%，透光性为22%-60%。

## Definition

Cridecor® Metalscreen is a new laminated safety glass incorporating polyester meshes, manufactured from metal deposits (aluminium, titanium, copper, gold, etc.) that uses the latest technological advances and provides solar control and privacy functions, as well as an unrivalled aesthetic value.

While the external side of the mesh has a shiny metal layer, which reduces vision from the outside, the internal side of the mesh is black, providing a neutral view to the outside. The wide range of densities of Cridecor® Metalscreen mesh, with apertures from 25% to 70%, as well as thicknesses between 140 and 260 microns, allow the designer to play with the sections, transparencies and reflections to always achieve the desired look. Cridecor® Metalscreen enjoys high energy-saving benefits, with "solar factor" values from 28% to 62% and "light transmission" values of 22% and 60% accordingly.

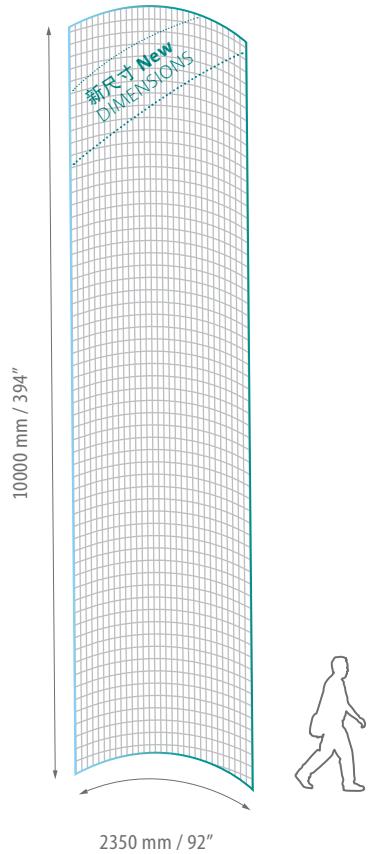
Metalscreen  
夹丝玻璃



CRIDECOR®

## 尺寸 Dimensions

夹胶片宽度 Interlayer width  
型号 Model 260: 2350mm  
型号 Model 140: 1950mm



L I T A

装饰玻璃 Decorative glass

Metalscreen  
夹丝玻璃





## 玻璃种类

该系列产品中的平板和曲面玻璃在用于室外时必须经过钢化或半钢化处理。

## 厚度

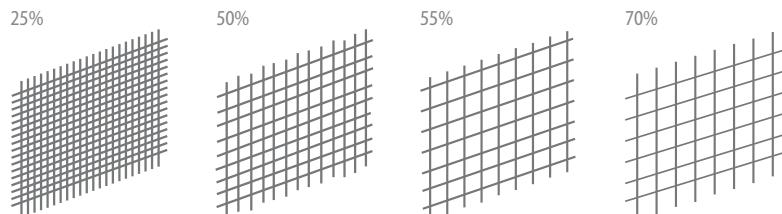
用于室内时, 产品厚度为4+4mm(5/32"+5/32")及以上。用于室外时, 厚度为+5(3/16"+3/16")及以上, 且需经过钢化或半钢化处理。

含铜(Cu,Al/Cu)涂层不可用于夹胶玻璃内层。但可使用金色或铜色印刷获得与含铜金属类似的外观效果。

## 网眼密度 Mesh density

Cridercor® Metalscreen 提供四种网眼密度供选择:

Cridercor® Metalscreen offers the opportunity of using four types of mesh apertures:



## Glass type

In both its flat and curved glass versions for exteriors (for example, facades), the glass will always be tempered or heat strengthened.

## Thickness

For interior applications, Cridercor® Metalscreen is available from 4+4mm (5/32"+5/32"). For exteriors, the minimum composition starts from 5+5 (3/16"+3/16") tempered or heat strengthened.

The copper-containing metal coatings (CU, AL/ CU) are no longer available as an inlay for laminated glass. As an alternative we are offering a printed standard solution "Gold" and "Copper". The appearance is very close to real copper-containing metals.

Metalscreen  
夹丝玻璃

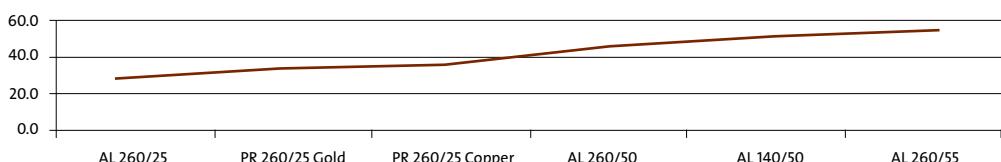
单向光谱反射及紫外线、可见光、近红外光谱投射测试结果  
Test results spectral reflexion/transmission UV/VIS/NIR, onesided

	g-value	qi	Te	Re outside	Re inside	Tv	Rv outside	Rv inside
AL 260/25	28.7	10.0	18.7	42.6	7.0	21.7	47.9	7.5
PR 260/25 Gold	34.0	13.2	20.8	28.2	5.7	23.8	29.5	6.0
PR 260/25 Copper	35.9	12.3	23.5	28.7	5.8	26.5	27.1	6.0
AL 260/50	45.5	8.0	37.5	31.4	6.1	42.6	35.1	6.4
AL 140/50	50.7	11.5	39.2	16.2	7.6	44.7	17.9	8.0
AL 260/55	53.9	10.3	43.6	16.4	6.3	49.9	17.6	6.6

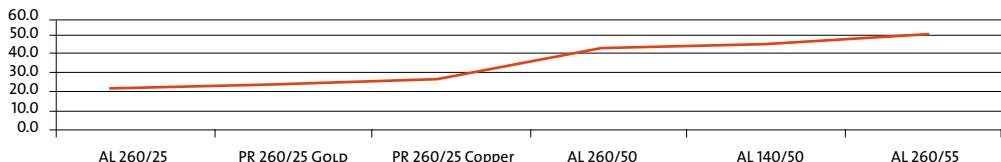
测试使用2x4mm超白玻璃, 结果载于2014年11月10日的EMPA St. Gallen的452'410号报告

Results according to test report no. 452'410 from EMPA St. Gallen of 10th November 2014 measured in 2x4mm low iron glass

## 太阳能系数 Solar Factor



## 光传导 Light Transmission





## 产品特点

Cridercor®夹丝玻璃具有单向玻璃效果, 可以给建筑带来金属反光外观, 反光程度取决于金属夹丝网眼的密度。该系列产品可以防止室外看到室内情景, 有效保护隐私, 同时显著减少室内眩光, 即使靠近幕墙办公也无需其它遮阳装置(屏风、百叶帘、窗帘等)。

## Characteristics

For facades, with the light differential between the exterior and interior of a building, Cridercor® Metalscreen generates a one-way optical viewing effect, giving a metallic external appearance whose reflection will depend on the chosen density of the mesh. This optical effect will provide both privacy (from the outside, it is not possible to see what is happening inside) and significantly reduce internal glare, allowing the user to work close to the façade without the need for any other solar protection (e.g. screens, blinds, curtains).

L I T A

**Metalscreen**  
夹丝玻璃

Castellana 79  
西班牙马德里 2010 Madrid, Spain 2010  
建筑师 Architect: Rafael de La-Hoz Arquitectos

Cridercor® Metalscreen也可以双面皆为金属质感  
Cridercor® Metalscreen puede ir impreso a doble cara