

Vanceva® colour system – Selecting Colours

How does the Vanceva® Colour System work?

The Vanceva colour system can produce a broad spectrum of colours and moods that are unachievable using stock selections of glass. The system is based on a *foundational palette* of **11** basic colours that can be combined in up to 4 coloured layers to produce individual coloured glass. Vanceva colour interlayers can be combined to produce over 1,000 *transparent, translucent or opaque colour options* to help you create the perfect tone and intensity.

A Vanceva colour interlayer formulation code is an identification number for a particular colour. One to four sheets of interlayer are typically used for the construction of the laminated glass. Since the maximum number of interlayers is four, each colour composite has been assigned a four-digit number.

What are the Vanceva Specialty Colours?

These are very concentrated coloured pigments in a single interlayer that add brilliant hues to laminated glass. Deep Red, True Blue and Tangerine can be combined with varying levels of white or foundation palette colours to achieve even more distinctive looks.

Can Vanceva interlayers be combined with other colour interlayers produced by a company other than Solutia?

No, Solutia does not advise to use any different colour interlayers in combination with Vanceva Interlayers.

How to specify a colour from the Vanceva colour system?

A Vanceva® formulation code is an identification number for a particular colour. One to four sheets of interlayer are typically used for the construction of the laminated glass. Since the maximum number of interlayers is four, each colour composite has been assigned a four-digit number.

Is a given colour repeatable?/Colour for replacement panels ?

A given colour is repeatable within Solutia specifications. For bigger projects, we recommend to use interlayers produced in one production batch.

How to achieve the different levels of Translucency/ Frosted Look?

If a project requires a frosted look for design or privacy reasons, a translucent colour can be created by adding one of the Vanceva white interlayers to the colour mix.



Two of the **11** foundation colours, (colours 9 -Arctic Snow, and A - Cool White) are translucent white interlayers. Cool White (A) is an 80% light transmission product and product Arctic Snow (9) is a 65% light transmission product. When these interlayers are used in the *Vanceva* system, they add opacity to the glazing system. These layers can be used in combination with the other 9 colours or can be laminated alone to produce a frosted glass appearance.

The use of more than one layer of colours 9 or A adds to the resultant opacity. As an example, colour AA9A consists of a four-layer system, three layers of which are product "A" (Cool White) and one layer of which is product "9" (Arctic Snow). When combined in the four layers (AA9A) the overall light transmission is 40%. These products can produce interlayers with light transmission that ranges from 80% (colour A alone) to 29% (colour 9999).

Our distinctive "pure white", opaque white colour option with a 7% light transmission feature further expands the design possibilities.

How many layers can be combined within 2 panes of glass?

The maximum recommended number of interlayers sandwiched between 2 panes of glass is four.

Samples

How do I order samples?

1) Product Studio

Please visit our design studio at <http://www.saflex.com/en/VancevaColorFamilies.aspx> to explore the colours. **SAMPLES CAN ONLY BE ORDERED VIA THE WEBSITE.**

If you know your four digit Vanceva colour combination reference, you can type this into the field below: "Know your 4-digit- reference", the colour will be displayed and you can add it to your shopping cart.

The samples are 10x10 cm glass laminates with 2mm glass.

2) Custom sized samples can be produced by the laminated glazing manufacturer.

Technical/Specifications

Are there any restrictions on size of the glass panels?

3.22 meters is the maximum width available for Vanceva colour interlayers.

Can Vanceva® colour interlayers be used in curved glass?

Yes, it is possible.

How stable is the colour?

Vanceva colourants are made up of highly resilient pigments, rather than the dyes commonly found in most ink-based colourant systems, and are designed to provide years of colour durability. We have 20 years of experience in natural exposure.

Extensive testing has been done on the hue stability of all Vanceva® brand poly(vinyl) butyral pigmented products. These products, including the Vanceva® Colour group, have been subjected to extensive natural and accelerated exposure testing. This testing concludes that there is no significantly adverse color shift (yellowing or otherwise) in these products when laminated and installed in accordance with Solutia's generally recognized methods as outlined in the Saflex® Lamination Guide.

For optimal colour durability, we recommend not to expose the following Vanceva® products to direct sunlight: yellow layers Sahara Sun and Golden Light (colour codes 4 and 8) as well as Tangerine (colour code E). For direct exposure applications, we recommend to cover those layers by one or more layers of clear or other coloured PVB interlayer.

If you have a question on the colour stability over time for a specific case, please contact us by sending an email to the following address: films-arch@solutia.com

The colours are layered between two pieces of glass. As the colour is in the interlayer and protected by the two layers of glass, cleaning and maintenance is easy and has no detrimental effect on the appearance.

UV Protection & Transmission

All architecturally targeted Vanceva interlayers will screen out all UV-C and all UV-B transmission. These interlayer products will also screen out UV-A radiation up to 380nm.

Can the edges of the glass be exposed?

Testing conducted in both natural (Florida) and accelerated (QUV and Xenon weatherometers) exposures have confirmed that by all measurement systems, when properly laminated and installed, glass laminates produced with Vanceva Design Interlayer will provide acceptable quality when the edges of the laminate are exposed to normal weathering.

In summary, when properly laminated, maintained, and installed under natural exposure conditions, the edge stability performance of Vanceva Design products is expected to provide acceptable quality laminates for exposed edge product applications.

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Can the Vanceva® colour system be used for external applications (without frame/sealant)? Yes. Examples for exterior Applications are: Doors, windows, curtain walls, wall coverings, overhead glazing.

Saflex recommends to assess the risk of thermal breakage for EACH project where laminated glazing featuring Vanceva® **colours** will be used for exterior applications (facades, roof, sunscreen, balconies...). If the simulation shows that indeed there is a risk, heat strengthened or fully tempered glass should be used in place of annealed glass. This simulation should be carried out by your glass supplier.

Which sealants are compatible with the Vanceva® interlayers?

Saflex cannot and does not recommend specific sealants.

Saflex has extensive experience with sealants using Saflex. The thoroughness of the application of sealants is just as important as the chemical interactions between the sealants and the PVB. The least reactive sealant poorly installed will perform worse than the most reactive sealant properly installed. Other effects such as weathering, paint ability, and application ease enter into the decision on which sealant to use. Often the installation will hide any cosmetic defects that may appear at the edge of the glass.

Is there a risk of thermal breakage?

Saflex **advises to use tempered laminated glass** to avoid thermal breakage: Thermal breakage may occur everywhere from hot countries (e.g. Spain) to cold countries (e.g.Scandinavia).

Consequently we, Saflex, recommend to assess the risk of thermal breakage for EACH project where Vanceva will be used for exterior applications (facades, roof, sunscreen, balconies...). If the simulation shows that indeed there is a risk, heat strengthened or fully tempered glass should be used in place of annealed glass. Of course for indoor applications (partition walls, balustrades,...) the risk of thermal breakage is slight (no direct sun radiation on the laminated glass)

What is the reaction to fire/Is standard Laminated Architectural Glazing (LAG) considered as non-combustible material?

As all Standard LAG, LAG made with Vanceva is rated "B": slightly combustible.

Is it also possible to have different colours SIDE BY SIDE or CUT INTO DIFFERENT SHAPES within 1 laminated glass unit?

Saflex does not advise to laminate 2 pieces of PVB next to each other within 1 laminate glass.

Does laminated glass have to be cleaned in any special way?

Laminated glass requires the same maintenance as standard laminated glass. No special cleaning tools or solutions are needed for traditional laminated glass. It is resistant to scratch and has easy maintenance/good durability.