



TECHNICAL NOTE - FOR THE FABRICATOR
MANUAL LUXURY SERIES



KRION™ is a new generation of solid surface developed by Systempool, a company belonging to Porcelanosa Group. A material that is warm to the touch with an appearance similar to natural stone, KRION™ is made of two thirds natural minerals (ATH: alumina trihydrate) and a low percentage of high-resistance resins. This composition ensures exclusive characteristics, such as nil porosity, antibacterial properties without the need for any kind of additive, hardness, resistance, low maintenance and an easy-to-clean surface.

KRION™ is worked like wood. This means that the sheets can be cut, joined, and thermoformed to create curved items. KRION™ can be used in the manufacturing process to make cast objects, allowing for the creation of designs and projects that would be impossible with other materials.

# **SECTORS**

All this makes KRION™ the perfect choice as a material for a wide variety of sectors including:







**HOUSING:** Thanks to its exclusive technical properties and aesthetic qualities,  $KRION^{TM}$  is an ideal solution in homes.



**DESIGN:** KRION<sup>TM</sup> can be used to make customized products or in made-to-measure projects.







**RESTAURANT & CATERING:** KRION<sup>TM</sup> generates a sensation of warmth and comfort, perfect for restaurants of all kinds.



**COMMERCIAL PREMISES & BUSINESSES:** With its large format, broad design potential and wide selection of colours,  $KRION^{TM}$  can be integrated in any setting, regardless of its shape.

# **APPLICATIONS**

The KRION $^{\text{TM}}$  range's numerous different series can be used in a wide variety of applications:















**TRANSPORT:** Its durability, imperviousness, resistance to the elements and to corrosion, and easy adaptability all make  $\mathsf{KRION^{TM}}$  an unparalleled choice for use in vessels.





**HOTELS:** Hotel facilities of all kinds can be fitted out with  $KRION^{TM}$ , from the reception area to hotel rooms, restaurants, spas and gymnasiums.





**PUBLIC & GOVERNMENTAL BUILDINGS:** A highly adaptable material, perfect for designing surfaces and products of all kinds or for combining with other materials (ceramic, glass, metal, wood etc.), leading to the creation of settings with a highly distinctive appeal.





**HEALTHCARE:** A warm-looking, seamless, anti-bacterial material that is hygienic, low on maintenance and easily repairable in situ.











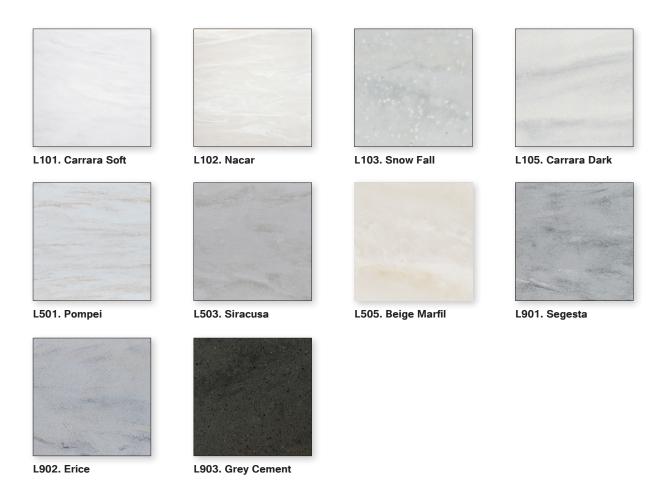
SIGNAGE

#### INTRODUCTION

Sheets in the KRION™ Luxury series are specially designed to feature a random pattern of veins and chips, with an appearance similar to natural stone. The veins run in one main direction, with some random secondary lateral variations. They range from subtle veining to a more marked noticeable pattern.

The general surface pattern might undergo variations throughout the thickness of the sheets.

Due to these and other technical characteristics of the Luxury series, this guide has been created to help in the fabrication process. For visual results of an acceptable standard, follow the instructions in this guide.



### TECHNICAL CHARACTERISTICS

- The edges of the sheets differ in appearance from the top surface.
- The veins and chips form a random pattern, running in one main direction across the sheets.
- This product has a lower thermocurving radius than other KRION™ products.
- · The veined pattern varies throughout the thickness of the sheets.
- Depending on the sanding and final finish, the general appearance may vary.
   A surface with a satin or gloss finish will be slightly darker and the veining and chips will be more clearly defined.
  - A surface with a matt finish will have a lighter, less well-defined appearance.
- The underside of the sheets differs in appearance from the top surface. The
  veined pattern is much stronger and more pronounced. Do not process the sheets
  on this side unless you seek this specific appearance.



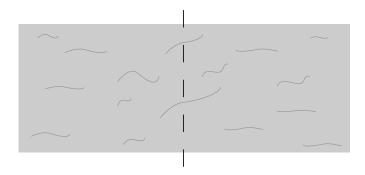
## **FABRICATING PROCESSES**

#### Choosing the sheet, direction of the veined pattern and combination of veins

Take your time when selecting the right parts of the sheets. Look for veins that run in the right direction and an appropriate veined pattern in order to ensure good visual results.

It is the fabricator's responsibility to choose the right patterns on the sheets so that the whole ensemble meets customer expectations.

Presenting the customer with samples of possible combinations of bonded sheets, front panels, rear trims, etc. will help them know what to expect.



When two sheets are bonded together, always make sure the pattern runs in the same direction.

On the side of the sheets, the KRION™ Luxury series bears an arrow showing the direction of the veined pattern and the batch number.

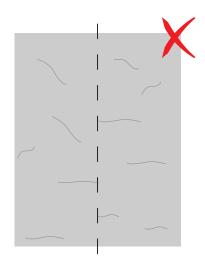
Sheets with consecutive numbers should be used so that the veined patterns are as similar as possible from one sheet to the next.

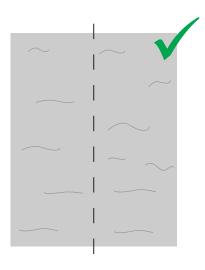
These numbers can be found at the end of the batch number, as shown in the following photograph. Even when sheets with consecutive numbers are used, it is important to check that the design is as expected before starting work.



A certain lack of continuity in the veined pattern might be noticeable near the seam between two sheets. The more pronounced the pattern is, the more noticeable this will be.

Choose areas with a softer veined pattern for the meeting point between sheets.

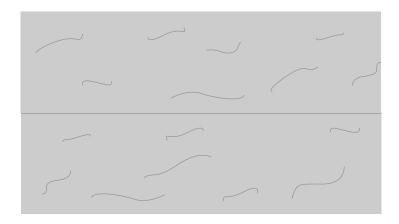




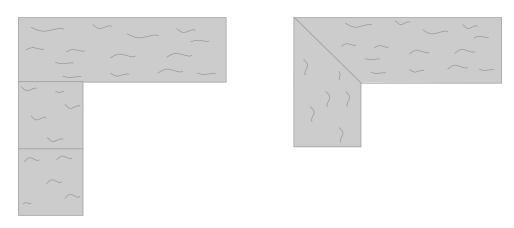


#### Choosing the sheet, direction of the veined pattern and combination of veins

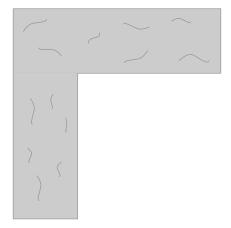
If the project requires a width of more than 750 mm, for a kitchen island for instance, the best way to bond the sheets is to position them beside one another, ensuring that the veined pattern runs in the same direction. Always make sure that there is no abrupt interruption in the veined pattern at the meeting point of sheets or ensure that any abrupt interruption coincides with places where the solid surface will be cut to recess a sink, kitchen hob or other item.



When an L-shaped countertop needs to be made, it is important to analyse which of the two methods to choose:



The following method is not advisable (the veined pattern of one sheet does not tie in with the veining of the adjoining one). This method can be valid providing that the meeting point between the two sheets has no veins or the veined pattern is a very soft one, thus avoiding a clearly noticeable seam.



The manufacturing and fabricating techniques used with the Luxury series are the same as those described in the "KRION™ Fabricators' Manual", with the exception of one important difference:

The edges of sheets from the Luxury series differ in appearance from the top surface.

When the edges are observed, random lines can be seen that coincide with the position of the different veins. These lines are impossible to predict. They might be anywhere on the edge to be cut.

#### Front panels

When a front panel is fabricated in "Stack" mode, this may also be observed:



Bear this in mind and make some samples so that the customer knows what to expect.

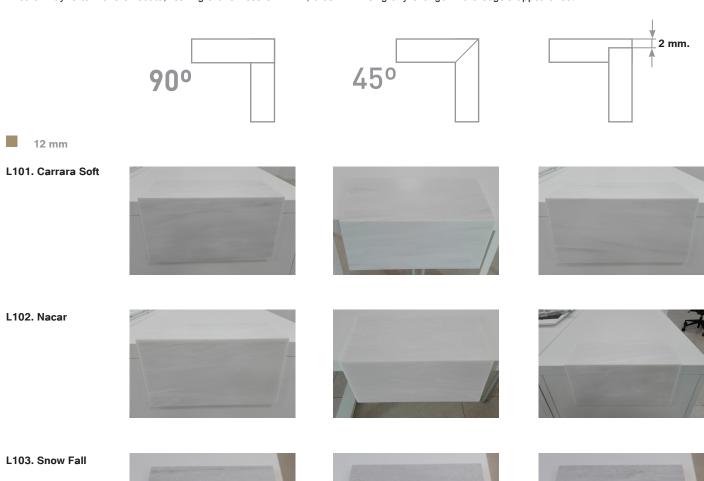


"Stack" front panel

The Luxury series should not be bonded at a 90º angle because the veined pattern does not continue from the inside to the outside of the sheet.

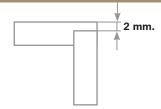
If the panel is cut at a 45º angle (with a mitre joint), the continuity of the veined pattern is ensured.

Another way is to make a rebate, leaving a thickness of 2 mm, thus minimising any change in the edge's appearance.









L105. Carrara Dark







L501. Pompei







L503. Siracusa







L505. Beige Marfil







L901. Segesta





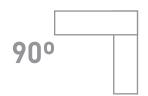


L902. Erice

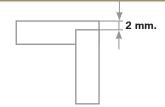












L903. Grey Cement







6 mm

L101. Carrara Soft







L102. Nacar







L105. Carrara Dark







L505. Beige Marfil







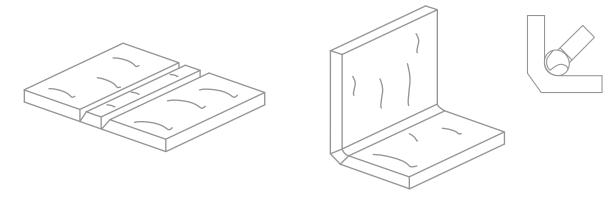
L903. Grey Cement







#### Rear trims

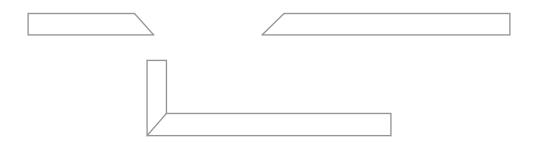


If a cove trim is required without the end appearance being affected in any way, use the v-grooved or folding method. In this way the material is not over-trimmed, thus ensuring no change in the surface pattern and hence continuity.

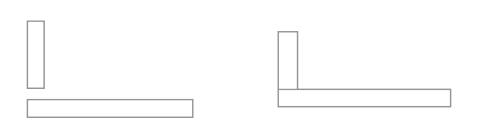
Pieces can also be joined at right angles with a perfect seal using KRION™ adhesive.

#### With a mitre joint

Cut the two pieces to be joined with a  $45^{\circ}$  angle and bond them with adhesive.



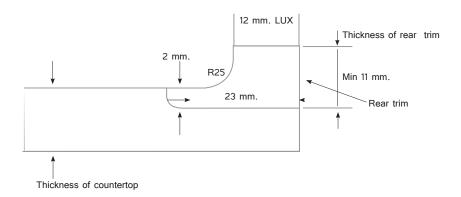
# Butt joints



#### Curved rear trim

To create this type of joint, a piece is added between the sheet and the trim section. The piece is a quarter round that replaces the  $90^{\circ}$  joint, so that its base is embedded 2 mm into the countertop, while the other end supports the rear trim (with the same thickness).

For interior corners, leave a minimum radius of 10 mm.



If you decide to choose this option, there may be veins or a colour concentration inside the sheet that may influence the uniformity of the pattern.

Warn the customer of this and make some samples so that they know what to expect.



Curved rear trims

#### Recessed washbasins and sinks



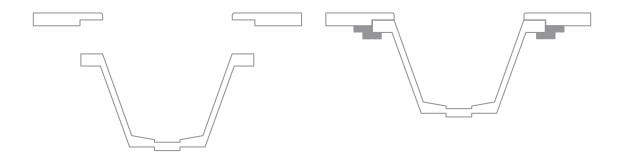
Recessed bowls



Bear this in mind and make some samples so that the customer knows what to expect.

Look at the following pattern. The sheet can be trimmed down to recess the bowl and reduce any noticeable change in the edge's appearance.

It can be trimmed down to leave a thickness of 5 mm, always taking the precaution of reinforcing the seam on the underside.



#### Making front panels with a mitre joint or rebate

Front skirts with a 45° mitre joint are the ones that best blend in, leading to a block-like appearance and continuous veining.

An edge with a bending radius of no more than 2 mm is advisable, because when this section is trimmed down, its appearance might be altered, leading to an abrupt change in the veined pattern.



## Thermocurving LUXURY

It is very important to heat the pieces to be thermocurved and the parts that will be adjacent to them in the same way.

Only limited minimum radii can be thermocurved with this series, since the sheets are designed to feature a multitude of chips of differing sizes that might jut out or come loose from the surface of the curved section.

Heating temperatures of  $140^{\circ}\text{C}$  ( $284^{\circ}\text{F}$ ) to  $155^{\circ}\text{C}$  ( $311^{\circ}\text{F}$ ) are required, depending on the radius, with the exception of Pompei, whose maximum is  $130^{\circ}\text{C}$  ( $266^{\circ}\text{F}$ ). Make sure that these maximum temperatures are not surpassed.

Colour	Thickness of the sheet	Heating time	Minimum bending radius	Maximum temperature
L101. Carrara soft	12 mm	20-22 min	R20	140ºC (284ºF) - 155ºC (311ºF)
L102. Nacar			R20	
L103. Snow Fall			R70	
L105. Carrara Dark			R40	
L503. Siracusa			R150	
L505. Beige Marfil			R60	
L901. Segesta			R200	
L902. Erice			R200	
L903. Grey cement			R240	
L501. Pompei	12 mm	15 min	R200	130ºC (266ºF)

## Thermocurving LUXURY

Colour	Thickness of the sheet	Heating time	Minimum bending radius	Maximum temperature
L101. Carrara soft			R20	
L102. Nacar			R20	
L103. Snow Fall			R40	
L105. Carrara Dark	6 mm	16 min	R30	140ºC (284ºF)
L505. Beige Marfil			R20	
L903. Grey Cement			R100	

# Sanding and finishing off the surface

The general end appearance may vary depending on the progressive sandpapers that are used and the final finish given to the surface.

With a satin or gloss finish, the result will be slightly darker, with more clearly defined veining and chips. With a matt finish, the pattern will be lighter and less well defined.

Also bear in mind that the pattern of the veins varies throughout the sheet. Thus if a specific area of the surface is over-sanded, some veins might fade and other new ones appear.

Sand the whole surface uniformly, paying special attention to thermocurved areas.

#### Backlighting (L501. Pompei, L505. Beige Marfil, L102. Nacar)

L501. Pompei, L505. Beige Marfil, L102. Nacar are models from the LUXURY Series with a certain translucency. This makes it ideal for projects involving backlighting.

Unlike the LIGHT Series, if different thicknesses of L501 Pompei, L505. Beige Marfil, L102. Nacar, sheets are created, thinner areas will be more translucent with a difference in the appearance of the veins.



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