

14. FABRICATION FOR SPECIFIC COLOURS

FABRICATION GUIDELINES

Solid Surface Material

Fabrication Considerations for HIMACS Sheet Materials

The distinctive visual characteristics of HIMACS sheet materials are a direct result of their unique manufacturing process. As such, conventional fabrication techniques—such as standard field seaming, edge finishing, and backsplash installation—are not appropriate for these products.

Traditional methods that perform adequately with solid colours or fine particulate compositions often fail to deliver satisfactory aesthetic results when applied to HIMACS materials. Consequently, it is essential to adopt fabrication techniques that are specifically suited to the colour and pattern of the sheet being used.

This section outlines the recommended fabrication approaches for various HIMACS colour ranges, ensuring optimal visual continuity and structural integrity.

1. Fabrication Guidelines for Marmo & Aurora Series



Marmo and Aurora are HIMACS products designed to emulate the natural aesthetics of marble. These materials are distinguished by their irregular and varied vein patterns—ranging from strong to subtle, large to small, and long to short—across both the surface and edges. These variations are inherent to the manufacturing process and are considered a characteristic of the product, not a defect.

Due to the complexity and inconsistency of the vein patterns, even sheets from the same batch may exhibit differences in colour and pattern. Long veins may not align perfectly across seams, which can result in visible inconsistencies at the joints. To mitigate this, fabricators must employ recommended seaming techniques or their own advanced methods to achieve the best possible visual outcome.

Fabricators and installers can reduce the visibility of seams by carefully assessing the distribution of vein patterns on each sheet and strategically planning the positioning and cutting. However, it should be noted that seamless integration, as seen with solid colours or granite-style materials, is not achievable with Marmo and Aurora due to their unique patterning.

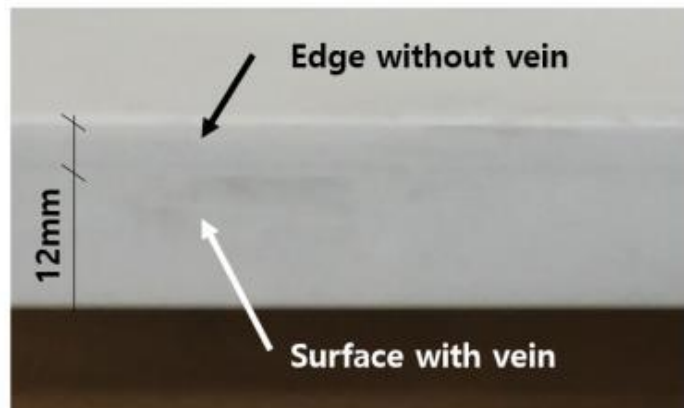
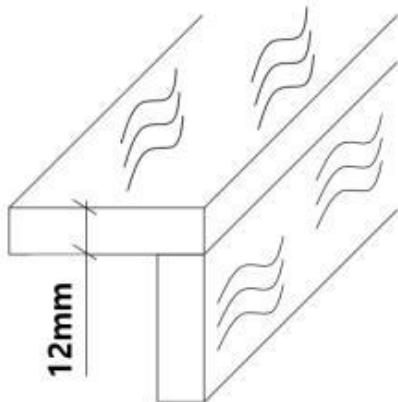
Customers must be informed prior to fabrication that visible seams may be present in the finished product. It is essential to explain the potential for increased material waste and to discuss the required quantity accordingly. Customer complaints regarding visible seams caused by vein pattern mismatches are not covered under the LX Hausys product quality warranty.

Given the high degree of variation in colour, shading, and pattern - often more pronounced than in sample swatches - it is advisable to allow customers to inspect the actual material and review proposed seaming layouts. To ensure alignment with customer expectations, LX Hausys recommends obtaining signed confirmation of understanding prior to fabrication.

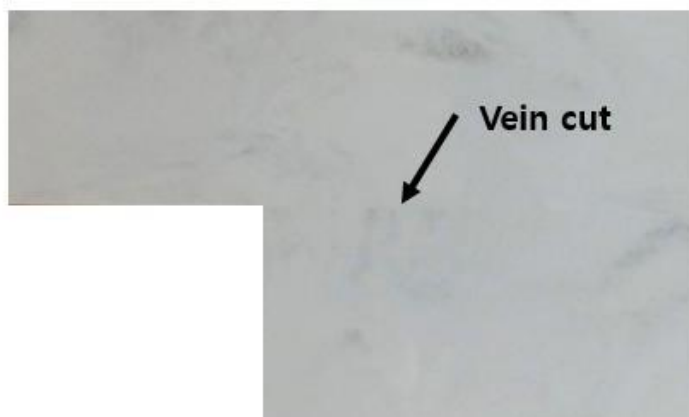
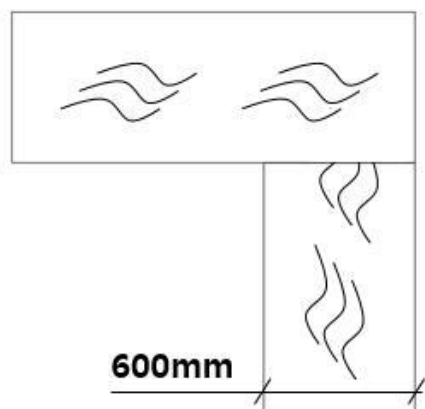
For optimal aesthetic results, LX Hausys strongly recommends adherence to the specified fabrication and installation methods outlined for the Marmo and Aurora series.

Quick Reference: HIMACS Marmo & Aurora Fabrication Guidelines

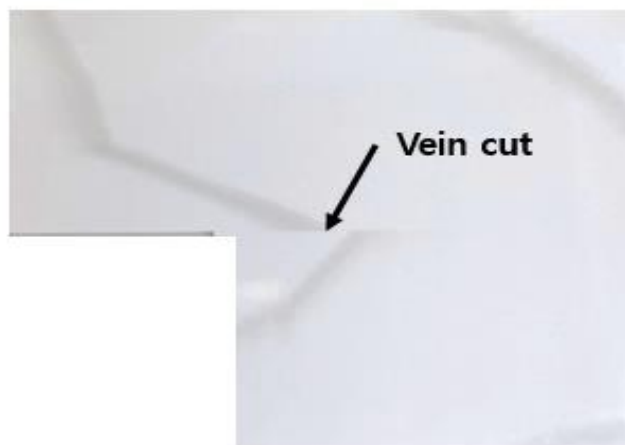
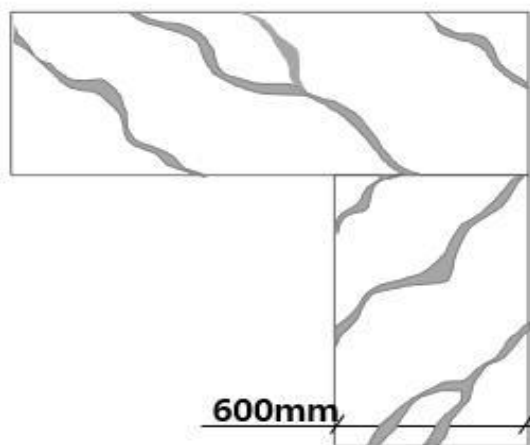
- **Material Characteristics:**
 - Irregular marble-like vein patterns are intentional and not defects.
 - Pattern and colour variation may occur within and between sheets.
- **Seaming Challenges:**
 - Long veins may not align perfectly, causing visible seams.
 - Seam visibility is more pronounced than with solid or granite colours.
- **Fabrication Recommendations:**
 - Use recommended or advanced seaming techniques to improve aesthetics.
 - Assess vein distribution before cutting and positioning sheets.
- **Customer Communication:**
 - Inform customers in advance about potential visible seams.
 - Explain increased material waste and confirm required quantities.
 - Encourage customers to view actual sheets and seaming layout.
 - Obtain signed confirmation of understanding to manage expectations.
- **Warranty Note:**
 - Visible seams due to vein mismatch are **not** covered under LX Hausys product warranty.



Difference from cut and veined product direction



Veined product aspect



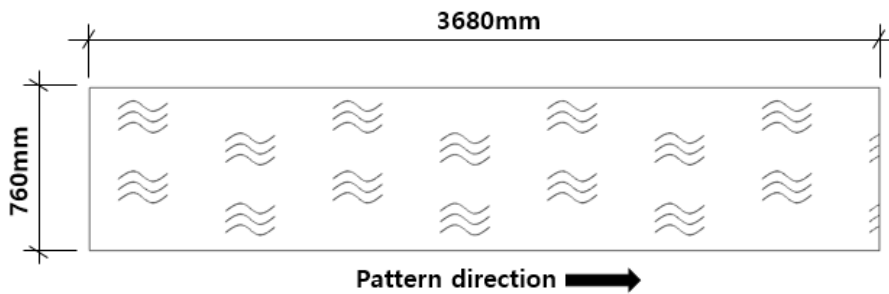
Fabrication Details

Seam Alignment for HIMACS Marmo and Aurora Materials

Due to the manufacturing characteristics of HIMACS Marmo and Aurora sheets, the marble-like vein patterns exhibit a distinct directionality along the length of the material. To achieve a visually cohesive seam design, it is essential that sheets are joined with the vein patterns aligned in the same direction.

Fabricators should verify the directionality by inspecting both the distribution of the vein pattern on the surface and the directional arrows marked on the reverse side of each sheet. Proper alignment ensures a more natural and aesthetically pleasing finish.

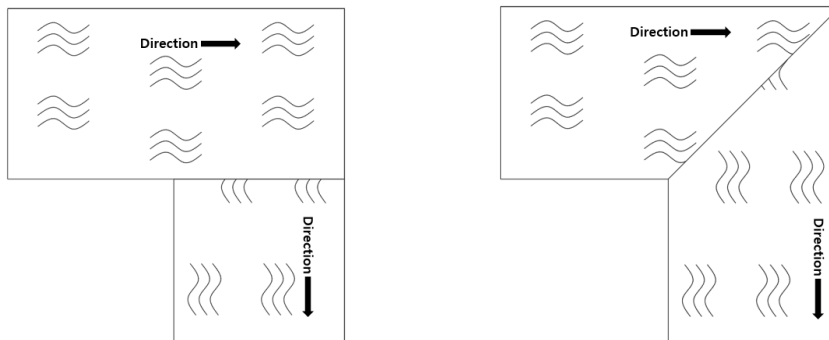
Design pattern on standard sheet



Seaming Considerations for "L"-Shaped Configurations

In "L"-shaped installations, the marble-like vein pattern of HIMACS Marmo and Aurora materials is interrupted at the joint, often resulting in a visible seam. To minimise this visual disruption and enhance the overall seam design, it is recommended that the vein pattern direction be carefully aligned across adjoining sheets.

Proper alignment of the pattern direction contributes to a more cohesive and aesthetically pleasing finish, even in complex configurations.



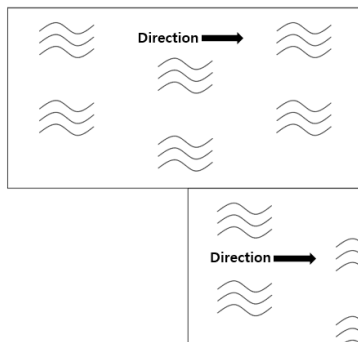
Parallel Joining Recommendations for HIMACS Aurora “M6XX” Series

When the length of one side to be joined is less than 760 mm—the standard sheet width—a parallel join may offer a more effective solution. It should be noted that the edge sections of Aurora “M6XX” series sheets may appear slightly darker than the central area due to inherent material characteristics.

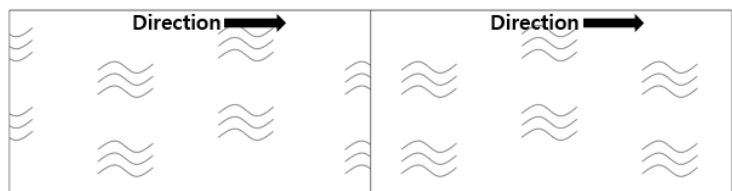
To minimise visible colour variation at the seam, it is recommended to trim 50 to 100 mm from the edge of the standard sheet before performing the join. This approach helps achieve a more uniform appearance across the joined surfaces.

Refer to the “Side-to-Side Join” section for further guidance on this method.

“L” shape with parallel join



End join



Seam Design Guidance for Marble-Effect Materials

To achieve a more refined and visually consistent seam design when working with marble-effect materials such as HIMACS Marmo and Aurora, it is recommended to align the direction of the vein pattern across adjoining sheets. Proper pattern alignment enhances the overall aesthetic and reduces the visibility of seams.

Seam Design and Colour Matching for Aurora “M6XX” Series

For improved seam aesthetics, it is recommended to align the marble-like vein pattern in a parallel direction across adjoining sheets. In the Aurora “M6XX” series, the outer edges of the sheet may appear slightly darker than the central area due to natural variation in the material. To minimise visible colour differences at the seam, it is advisable to trim 50 to 100 mm from the edge of the standard sheet prior to joining. This practice helps achieve a more uniform appearance and enhances the overall finish.

Benefits of Trimming Sheet Edges Before Joining

1. Improved Colour Uniformity

The outer edges of Aurora "M6XX" sheets may appear slightly darker than the central area due to natural variation in the material. Trimming 50–100 mm from the edge helps eliminate this darker section, resulting in a more consistent colour across the seam.

2. Enhanced Seam Aesthetics

By removing the edge portion, the joined surfaces better match in tone and pattern, reducing the visual impact of the seam and contributing to a more refined finish.

3. Better Pattern Continuity

Trimming allows fabricators to work with the more uniform central area of the sheet, making it easier to align the marble-like vein patterns for a seamless appearance.

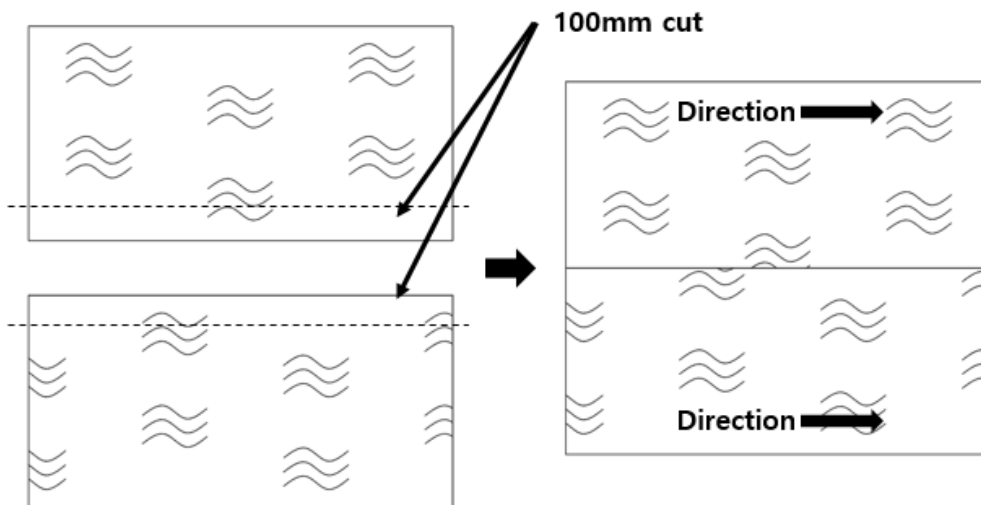
4. Reduced Risk of Customer Complaints

Minimising visible colour and pattern differences at the seam helps meet customer expectations and reduces the likelihood of dissatisfaction with the final product.

5. Professional Finish

This practice reflects attention to detail and adherence to best fabrication standards, reinforcing the quality of workmanship.

Side to Side join



Edge Treatment Recommendations for HIMACS Marmo and Aurora Sheets

Due to the manufacturing characteristics of HIMACS Marmo and Aurora materials, the marble-like vein pattern and colour at the sheet edge may differ slightly from the appearance of the main surface. To achieve a more refined and visually cohesive edge design, it is advisable to conceal the sheet edge wherever possible.

Recommended methods include:

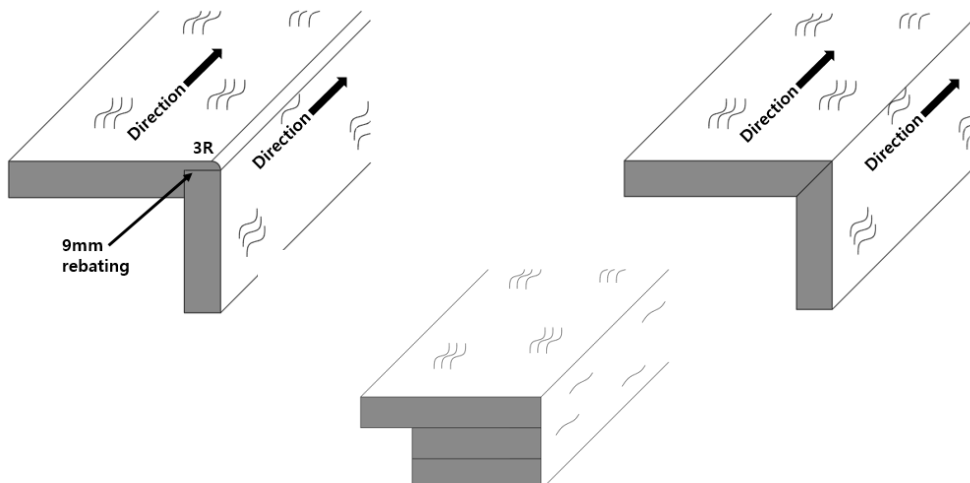
- **V-Grooving (45° Cut and Join):** This technique effectively hides the edge by creating a seamless transition between surfaces, offering the most aesthetically pleasing result.
- **9 mm Rebating:** A practical alternative that also helps minimise the visibility of edge variation.
- **Stacked Edge:** While this method may produce a slightly different appearance compared to the main surface, it generally blends well with Marmo and Aurora patterns and is suitable for a wide range of edge designs.

These approaches help maintain the natural look of the material and improve the overall finish of the fabricated product.

Sanding Precautions for Long Vein Patterns in HIMACS Materials

HIMACS sheets featuring long vein patterns have these details formed with a slightly shallower depth than typical marble-effect surfaces. Excessive sanding may result in the removal or distortion of the vein pattern.

To preserve the visual integrity of the material, avoid deep sanding—particularly around join lines. Instead of levelling the join through sanding, it is recommended to minimise any height discrepancy at the seam during the initial fabrication and assembly stages. This approach helps maintain the continuity and appearance of the long vein design.



2. Fabrication Guidelines for Glitter and Pearl components



Edge Fabrication Guidance for Glittering Colours (e.g., Perna) in HIMACS Sheets

Certain HIMACS colours, such as Perna, feature a glittering or pearlescent effect that is visible only on the main (plane) surface of the sheet. This effect does not appear on the sheet edge, which is a characteristic of the manufacturing process and not a defect.

To achieve the best visual result when fabricating edges with these colours, it is recommended to conceal the sheet edge wherever possible. The following methods are advised:

V-Grooving (45° Cut and Join): This technique effectively hides the edge, ensuring a seamless appearance and maintaining the glittering effect on visible surfaces.

9 mm Rebating: Also useful for minimising the visibility of the edge where the glittering effect is absent.

Stacked Edge: While this method does not replicate the glittering effect on the edge, it remains suitable for a variety of edge designs and generally blends well with the overall appearance.

A simple 90° butt seam is not recommended for glittering colours, as it will not display the desired effect on the edge.

Why a 90° Butt Seam Is Not Recommended

- **No Glittering Effect on the Edge:**

The glittering or pearlescent effect is only present on the main (plane) surface of the sheet, not on the edge. When a 90° butt seam is used, the exposed edge will lack the glittering effect, resulting in a visible and aesthetically inconsistent join.

- **Noticeable Visual Discrepancy:**

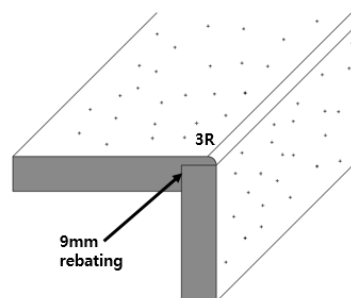
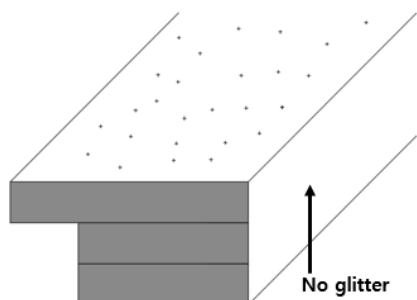
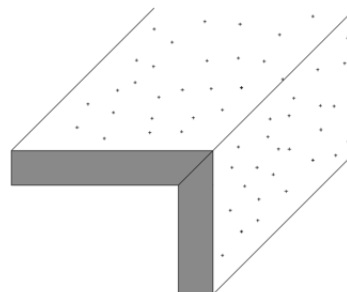
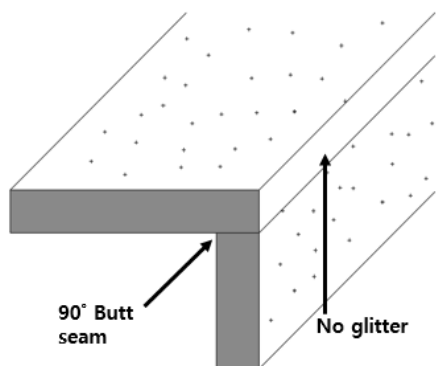
The difference between the sparkling surface and the plain edge becomes obvious at the seam, drawing attention to the join and detracting from the overall appearance.

- **Unprofessional Finish:**

The absence of the glittering effect on the edge can make the finished product look incomplete or poorly fabricated, especially when compared to methods that conceal the edge.

- **Better Alternatives Available:**

Techniques such as V-grooving (45° cut and join) or rebating hide the edge, ensuring the glittering effect is maintained on all visible surfaces and providing a more seamless, high-quality finish.



3. Fabrication Guidelines for Lucent & Semi-Lucent series



Fabrication Guidance for Translucent Colours (Lucent and Semi-Lucent) in HIMACS Sheets

Certain HIMACS colours exhibit a translucent effect when illuminated with an LED backlight. Due to the refraction of light, seam lines and corners may appear shaded. This shadowing is a natural characteristic of these materials and not a defect. For a full list of applicable colours, please refer to the sample book.

Seam and Corner Recommendations:

The use of a simple 90° butt seam for edges and corners is not recommended, as it tends to accentuate shadowing.

To achieve the best translucent effect, it is advisable to conceal the sheet edge wherever possible. V-grooving (45° cut and join) is the preferred method, as it minimises visible shadows at seams and corners.

Customer Communication:

Prior to fabrication, it is important to inform customers about the potential for shadowing at seams and corners, as well as the influence of light and structural design on the final appearance.

Discuss the positioning of seams and the overall structure to ensure customer expectations are managed

Quick Reference: Fabrication of Translucent Colours (Lucent & Semi-Lucent)

Material Characteristics

- Translucent effect is visible with LED backlighting.
- Shadows at seams and corners are caused by light refraction—this is a natural feature, not a defect.

Seam & Corner Recommendations

- Avoid simple 90° butt seams for edges and corners, as these accentuate shadowing.
- Use V-grooving (45° cut and join) to conceal sheet edges and minimise visible shadows.

Customer Communication

- Inform customers in advance about possible shadowing at seams and corners.
- Discuss seam positions, lighting, and final structure before fabrication to manage expectations.

Reference

- For a list of suitable colours, consult the HIMACS sample book.

Guidance for Fabricating Lucent and Semi-Lucent HIMACS Products

Important Note:

Due to the light-transmitting properties of Lucent and Semi-Lucent HIMACS sheets, visual differences in translucency and colour may become apparent at the seams after bonding. These variations can occur even with minor differences in light intensity or component composition, provided these are within manufacturing tolerances.

Best Practice Recommendations:

- Always use sheets from the same production lot, ensuring closely matching batch numbers.
- Prior to bonding, check the translucency of all sheets under the intended lighting conditions. Only proceed if no visible differences are detected.
- For veined patterns, be aware that variations in vein distribution may affect both the density of the visible pattern and the transmission of light when backlit. This is a natural characteristic of the product and not a defect.
- Test veined sheets with backlighting before bonding and plan fabrication and installation with careful consideration of vein distribution.

Lighting Condition Tips:

- Assess all sheets under the actual lighting setup (including LED backlighting) that will be used in the final installation, as different light sources and intensities can highlight variations.
- Ensure lighting is evenly distributed across the surface to minimise the appearance of seams and colour differences.
- Avoid strong spotlights or uneven lighting, which can exaggerate shadows at seams and corners.
- If possible, conduct a trial assembly with backlighting in the workshop to confirm the visual effect before final installation.

4. Fabrication Guidelines for Irregular-pattern products with large and small chips (Lucia, Volcanics, Aster & Terrazzo)



Guidance on Chip Distribution and Appearance for HIMACS Products

This product is characterised by a rugged, robust texture created through the irregular distribution of large, high-contrast special chips. LX Hausys is committed to providing a diverse range of contemporary chip designs. However, the natural and deliberately uneven distribution of chips—a defining feature of the design—means that variations in chip placement may occur both between different sheets of the same pattern and within a single sheet.

Such differences may be noticeable between flat surfaces or between surfaces and edges and may result in perceived colour variation. These variations are an inherent aspect of the product's design and should not be regarded as defects.

Impact of Chip Distribution on Appearance

- **Visual Variation:**

The irregular and intentional distribution of large, high-contrast chips creates a distinctive, rugged texture. This means that the appearance of the surface can vary not only between different sheets of the same pattern, but also within a single sheet.

- **Surface and Edge Differences:**

Variations in chip density and placement may be noticeable between flat surfaces and edges, potentially resulting in perceived colour differences or pattern inconsistencies.

- **Design Intent:**

These variations are a deliberate feature of the product's design, intended to provide a natural and dynamic visual effect. They are not considered defects.

- **Customer Expectations:**

It is important to inform customers that such differences are inherent to the material and may be more pronounced in certain installations, especially where sheets are joined or where edges are exposed.

Edge Finishing and Seam Recommendations for Large-Chip and Special-Chip HIMACS Patterns

Due to the manufacturing process, large chips within HIMACS sheets tend to migrate towards the surface, resulting in a different chip distribution between the surface and the reverse side when viewed from the edge. For a comprehensive list of available colours, please consult the sample book.

Seam and Edge Guidance:

- To achieve a high-quality edge finish with large-chip or special-chip patterns, it is advisable to avoid exposing the cross-section of the sheet, as this area often displays a noticeable difference in chip density.
- The most effective method is V-grooving (45° mitre cutting and bonding), which conceals the cross-sectional chip distribution and provides a seamless appearance. This is the recommended fabrication technique for all large-chip and special-chip designs.
- Alternatively, a cut-back method may be used to minimise the exposure of the cross-sectional area.

Client Communication and Fabrication Planning:

- As the surface of large-chip and special-chip patterns naturally exhibits non-uniform chip distribution, it is essential to inform clients of this characteristic prior to fabrication, to manage expectations regarding potential differences at seams or between sheets.
- During fabrication and installation, always inspect the chip layout and plan the work to achieve the most consistent appearance possible.

Step-by-Step Guide: Edge Finishing and Seam Planning for Large-Chip & Special-Chip Patterns

1. Understand Material Characteristics

- Large chips tend to migrate towards the surface during production, resulting in different chip distributions between the surface and the reverse side.
- Variations in chip density may be visible between flat surfaces and edges, or at seams.

2. Plan Sheet Usage

- Refer to the sample book for the list of available colours and patterns.
- Inspect all sheets prior to fabrication to assess chip layout and distribution.

3. Edge and Seam Preparation

- **Avoid exposing the cross-section** of the sheet, as this area often shows a noticeable difference in chip density.
- For best results, use **V-grooving (45° mitre cutting and bonding)** to conceal the cross-sectional area and achieve a seamless appearance.
- Alternatively, apply a **cut-back method** to minimise the exposed cross-section if V-grooving is not feasible.

4. Client Communication

- Clearly inform clients that non-uniform chip distribution is an inherent feature of the product and not a defect.
- Explain that differences at seams or between sheets are to be expected due to the design.

5. Fabrication and Installation

- During fabrication, continually inspect chip layout to ensure the most consistent appearance possible.
- Plan joins and edge treatments to optimise visual uniformity across the installation.

This guideline has been created to provide technical information for successful fabrication and installation of HIMACS, and it is intended to be used in a safe environment considering their own discretion and risk by who has technical skill for fabrication and installation of HIMACS.

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