

Interior Solid Surface Material

HI-MACS[®]
Natural Acrylic Stone™

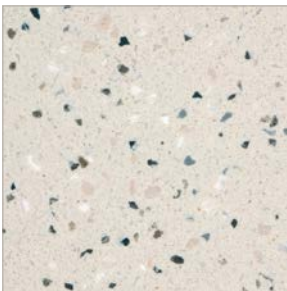
TDS – TECHNICAL DATA SHEET
TERRAZZO COLLECTION

Colours belonging to the Terrazzo collection exhibit a greater variation in colour, shading, and pattern than is apparent in small size samples. Even A4/A3-size samples and full-sheet photographic images can't fully capture these variations. If possible, allow the customer to view the actual material together with seaming layout examples and have the customer sign a "declaration of understanding" to help ensure that the finished countertop is consistent with customer expectations.

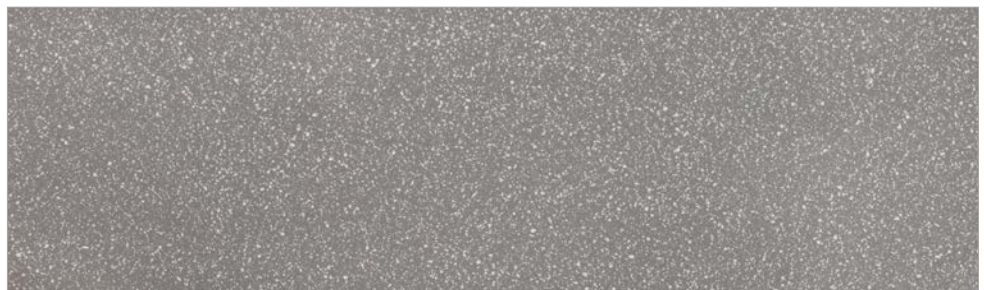
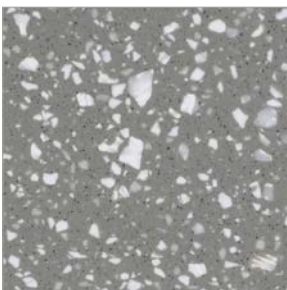
When fabricating Terrazzo it's important to use consecutive sheets whenever there will be a field seam or a seam creating a "U"- or "L"-shaped top. Even with consecutive sheets it's important to visually verify alignments before beginning fabrication. Either approach will not only deliver a more pleasing appearance but will minimize the visibility of seams and joints.

■ 1 Product Specifications

1.1 Available colours



Q001
Terrazzo Classico



Q002
Terrazzo Grigio

1.2 Product Specifications

GROUP	SHEET COLOUR CODE	COLOUR NAME	SHEET THICKNESS	SHEET SIZE (WIDTH X LENGTH)	M ² PER SHEET	WEIGHT PER SHEET	SHEETS PER PALLET
Terrazzo	Q001	Classico	12 mm	760 mm x 3680 mm	2.7968	ca. 56,7kg	20
	Q002	Grigio	12 mm	760 mm x 3680 mm	2.7968	ca. 56,7kg	20

1.3 Sheet & Adhesive Colour Codes

SHEET			ADHESIVE		
GROUP	COLOUR CODE	COLOUR NAME	COLOUR CODE	COLOUR NAME	PACKAGING UNIT
Terrazzo	Q001	Classico	H32	Ivory	45 ml / 250 ml
	Q002	Grigio	H109	Mud Grey	45 ml / 250 ml

1.4 LRV: Light Reflective Values

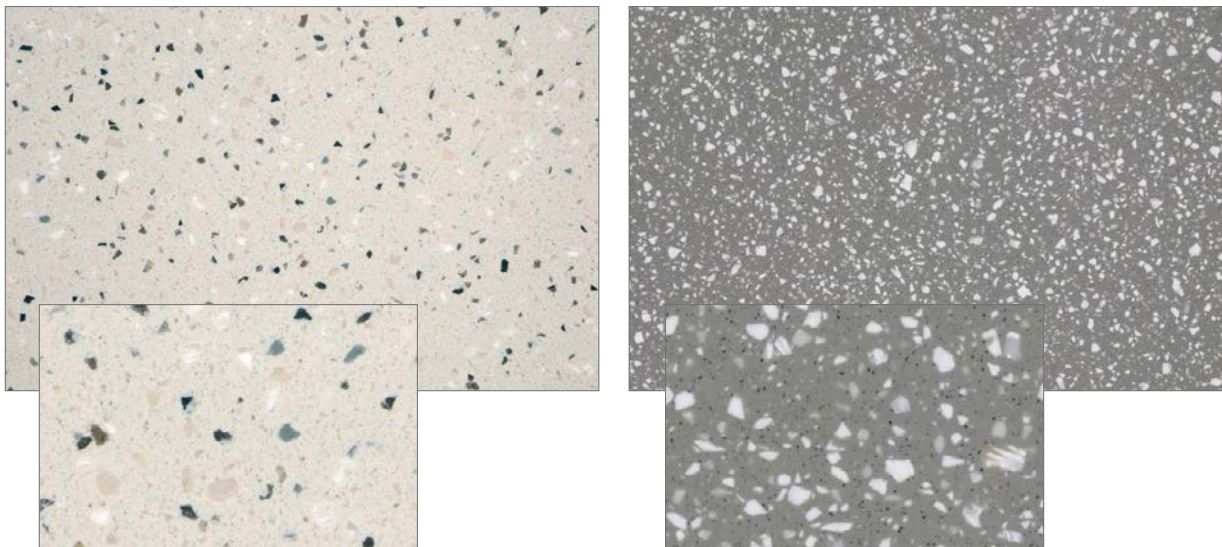
GROUP	SHEET COLOUR CODE	COLOUR NAME	LRV
Terrazzo	Q001	Classico	58.29
	Q002	Grigio	26.24

2. Fabrication

2.1 Special Sheet Characteristics

Customer expectations are best managed by fully educating the customer about product characteristics. For instance, the "motion" of chip distribution that appears on the surface doesn't continue directly through the sheet thickness. The top of a Terrazzo sheet looks nothing like the bottom of that sheet and the cross-section looks nothing like either surface. Some of these differences are shown below:

The color and pattern distribution on the surface changes due to random chip distribution of colours in different sizes and partly different collection places. This is a special pattern design and would not be valid for warranty claim.

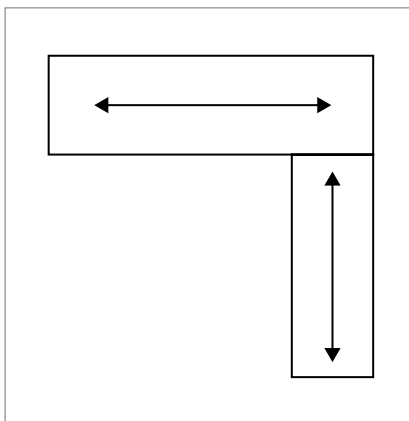


Hint:

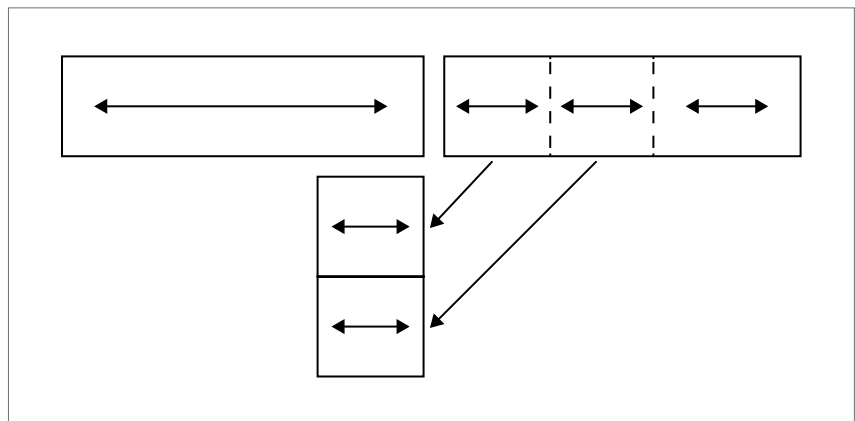
Terrazzo is the same material as any other HI-MACS[®] product, but it requires special consideration in order to fabricate an aesthetically pleasing finished product. We strongly advise the fabricator to confirm that the purchaser and the end user understand these considerations before proceeding.

2.2. Sheet to Sheet bonding flow

Fabricating an "L-shape" or "U-shape" countertop presents other challenges. Depending on the character of the HI-MACS® material, in some cases you may wish to have the "extension(s)" placed perpendicular to the primary surface (Example 1). In other cases you may find that placing the "extension(s)" on the same plane as the primary surface works best (Example 2). There's no way to determine which method will work best with any particular color other than to visually evaluate the configurations.

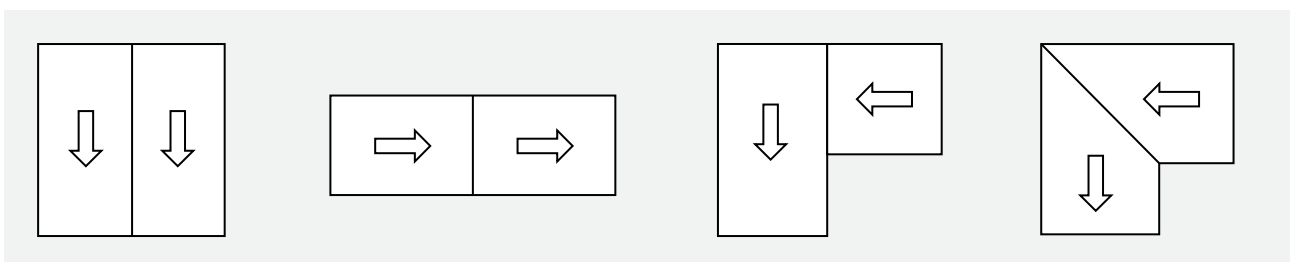


Example 1

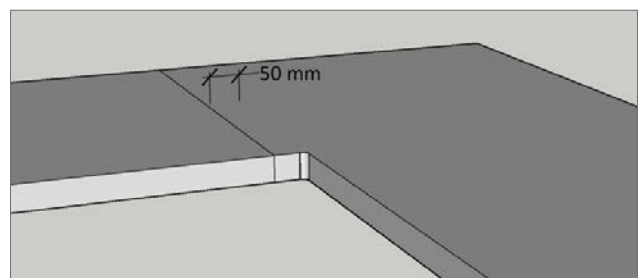


Example 2

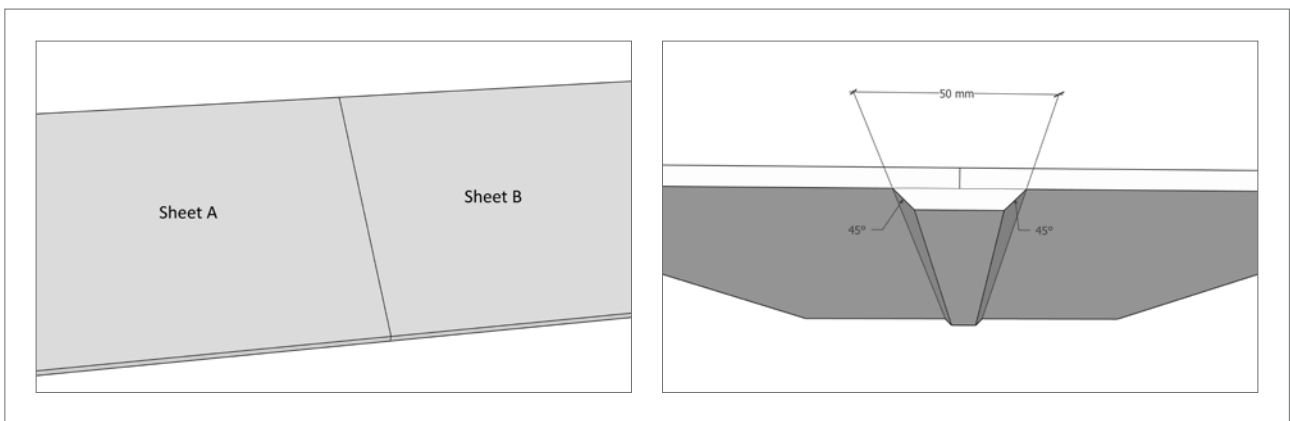
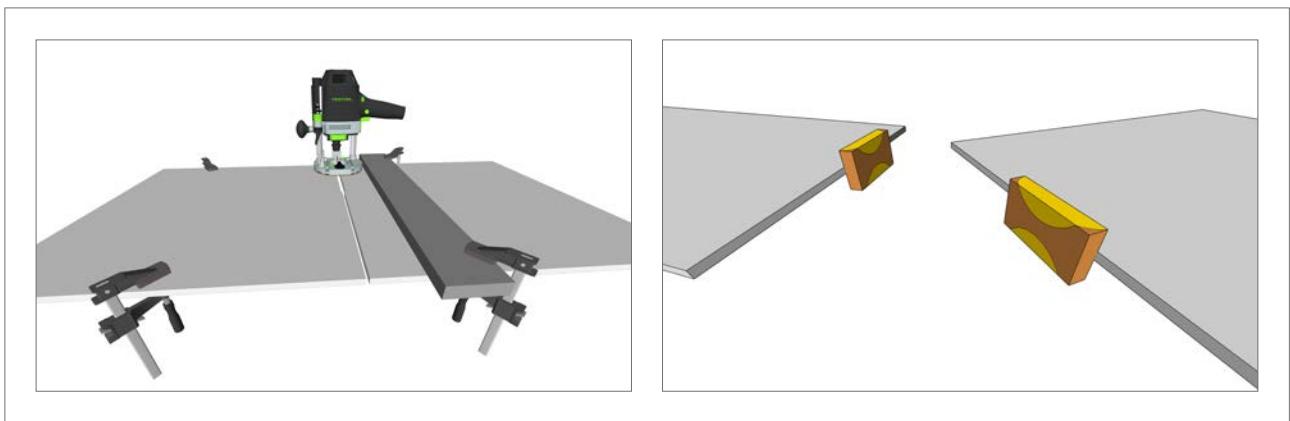
When bonding sheet to sheet double check the best chip consistency and flow according to its overall look. There's no way to determine which method will work best with any particular color other than to visually evaluate the configurations. Again, We strongly advise the fabricator to confirm that the purchaser and the end user understand these considerations before proceeding.



To achieve the best result of the visible pattern direction, particularly with the Terrazzo colours on an L- or an U-shape counter it may best to lay down the sheets of use to get an overview of continuous flow of chips before starting fabrication:



The cut has to be prepared absolutely straight and also parallel (mirror cut).
Re-sand the cut edge with sandpaper of approx. 180grit (or 60 micron).
Always clean off the cut edges from dust with a white cloth and use denatured alcohol or acetone.
Ensure the edge is absolutely straight when making a seam.
Ideally, make a profile, such as a tongue and groove.
Ensure always to fabricate a re-enforcement strip (for kitchen worktops a 45° angled edge and smooth the adhesive line) from underneath.
Always tighten pressure – but do not over tighten the pressure to the seam.

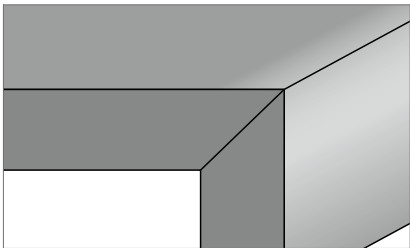


Note:

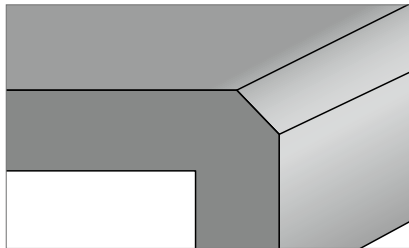
the adhesive is not developed as filler for repairs. In the case of damage to the surface it is strongly recommended to make a plug repair if possible (tools should be readily available local to you to purchase – please contact your local technical support).

2.3 Edge bonding flow

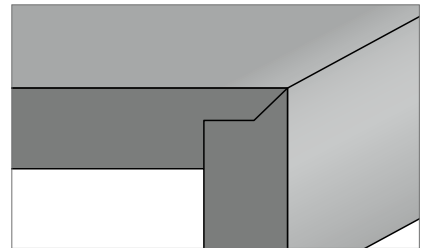
To let the pattern flow around the edges a 45° angled cut of the edge or an alternative rebate is one of the best solutions.



Standard V-grooved



Standard with bevel

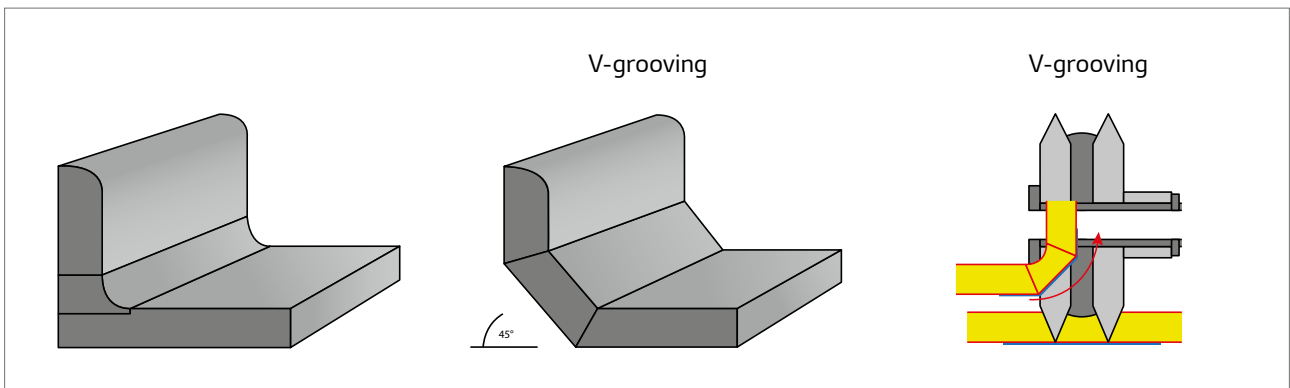


Standard V-grooved and angled

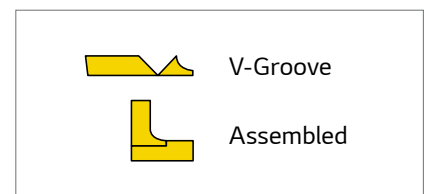
For the bonding process of the edges please follow the instructions of edge treatments. Also here: We strongly advise the fabricator to confirm that the purchaser and the end user understand these considerations before proceeding; a sample should be prepared for the client to view and sign off.

2.4 Backsplash flow

To let the pattern flow around the edges a 45° angled cut of the edge or an alternative rebate is one of the best solutions.



A downturn or an upstand are best achieved with a 45° angle or a profiled folding option – see picture 3 (V-grooving).



2.5 Sanding (finishing)

- The reference is as recommended with our standard products.
- For further details: **See TDS-no.4 Sanding.**

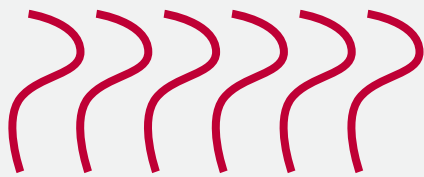


		Standard recommendation					
FINISH-LEVEL	MATT-FINISH		SEMI-GLOSS-FINISH		HIGH-GLOSS-FINISH		
HI-MACS® colour family	for all colours		for all colours		for all colours		
Sanding steps	micron-sandpaper	grid-sandpaper	micron-sandpaper	grid-sandpaper	micron-sandpaper	grid-sandpaper	
Step 1	100/80 µ	150/180 µ	100/80 µ	150/180 µ	100/80 µ	150/180 µ	
	take dust away		take dust away		take dust away		
Step 2	60 µ	220	60 µ	220	60 µ	220	
	take dust away		take dust away		take dust away		
Step 3	"useit®" Superpad S/G Scotch Brite™ Maroon 7447	280	40/30 µ	280/320	30 µ	280/320	
	take dust away		take dust away		take dust away		
Step 4	industrial paper towel	"useit®" Superpad S/G Scotch Brite™ Maroon 7447	"useit®" Superpad S/G Scotch Brite™ Super fine Grey	380/400	15 µ	380/400	
	take dust away		take dust away		take dust away		
Step 5		industrial paper towel	industrial paper towel	"useit®" Superpad S/G Scotch Brite™ Super fine Grey	9 µ	600/800	
			take dust away		take dust away		
Step 6				industrial paper towel	Finesse-it™ Finish-component	1200	
					take dust away		
Step 7						1500	
						1800	
						2500	

2.6 Thermoforming

To prepare the workpieces, follow the standard thermoforming process.

The recommended thermoforming process is to use a pre-heating oven with double sided heating plates.



Best Heating Temperature:
155°C – 175°C



Best Heating Time: contact heat
12 – 18 min.

The heating time is similar to the general heating time of HI-MACS[®] products for the thermoforming process.

The recommendation of smallest radius for 2D of Terrazzo is approx. $\geq 200\text{mm}$.

Ensure the work-piece is heated totally through.

Be aware that not using recommendations in relation to the radii can cause some colour change or create some cracking or damages to the work-piece.

For any technical inquiry contact your local technical support.

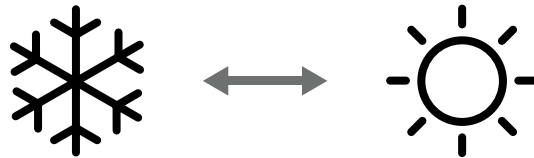
For more detailed thermoforming equipment or any thermoforming accessories please contact global@nabuurs.com or visit the website: www.globalvacuumpresses.com



$R_i \geq 200 \text{ mm}$

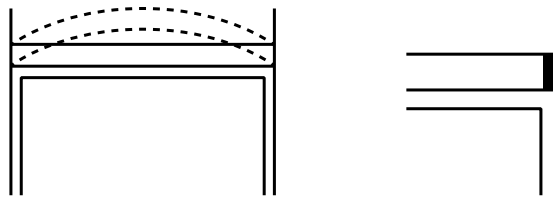


3. Thermal Expansion



Sufficient space should be given to compensate for expansion or contraction at the time of installation since this product may expand or contract depending on the temperature.

Allow 1.5 mm per linear meter for expansion and contraction.



Expansion coefficient HI-MACS[®] according to norm DIN EN 14851:

$$\Delta t = \text{ca. } 48 \times 10^{-6} / K$$

■ 4. Quality Check

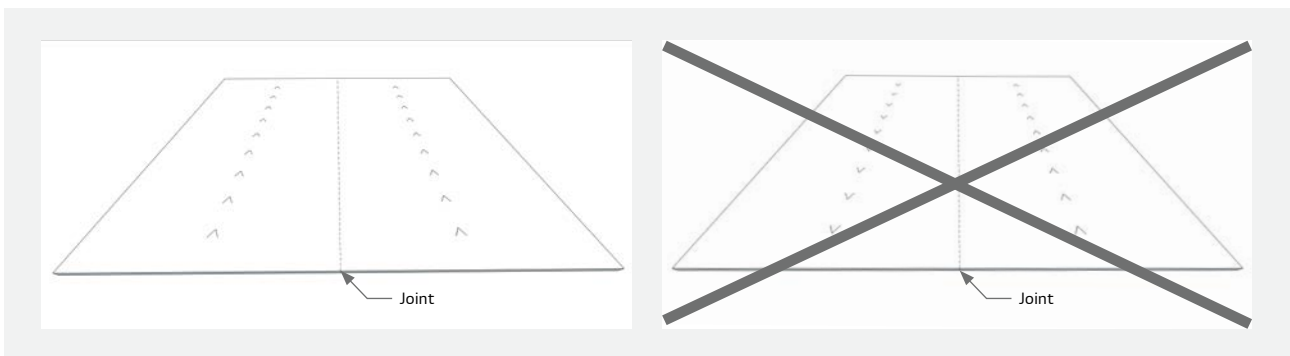
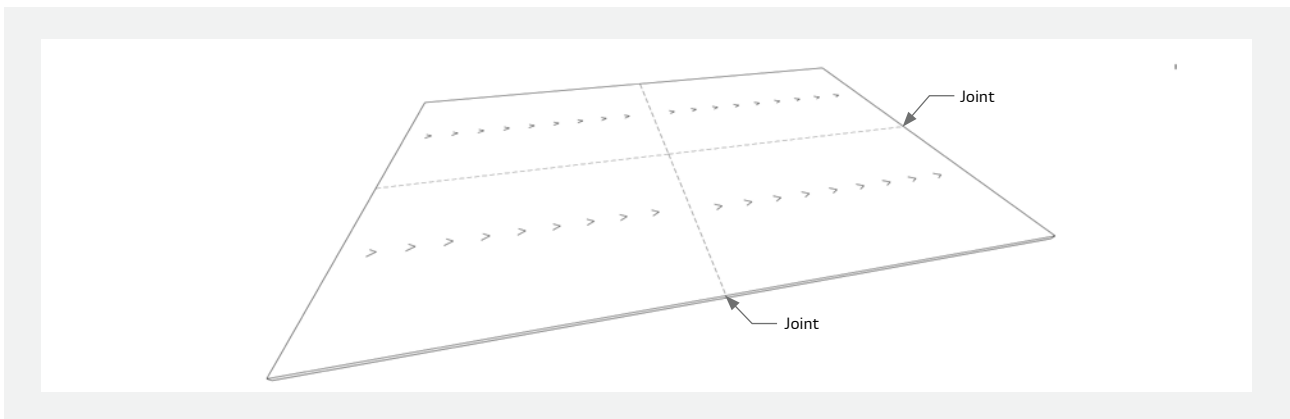
- Check any fabricated item on quality aspects before leaving the workshop.
- In case of any mistakes it easily can be repaired in the workshop and keeps the time of re-work very low.
- Any damage or any mistakes which will be recognized at a later time will make the fixing much more expensive.

Important Hint:

Remember that the 15 Year Limited Installed Warranty does not cover any failures due to fabrication or installation mistakes.

5. Summary of Hints

When using several sheets for doing one job ensure a continuous flow of sequential numbers as well as the same production flow.
Do not turn one sheet into a different direction from the next or opposite side (**no turn** of any sheet by 90°, 180° or 270°).



Terrazzo is the same material as any other HI-MACS® product, but it requires special consideration in order to fabricate an aesthetically pleasing finished and designed product. We strongly advise the fabricator to confirm that the purchaser and the end user understand these considerations before proceeding.

The adhesive is not developed as a filler for repairs. In the case of damage to the surface it is strongly recommended to make a plug repair if possible (tools are available on the market – please contact your local technical support).

5.1 Hints and Tips

Remember that the 15 Year Limited Installed Warranty does not cover any failures due to fabrication or installation mistakes.

Keep a record of the fabricated sheet-no's including each sequential number.

Check the overall spread of chip consistency – once assessed determine if suitable and how to use in project installation.

Check Quality of fabricated goods, before delivery.

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