

Interior Solid Surface Material

HI-MACS[®]
Natural Acrylic Stone[™]

TDS
TECHNICAL DATA SHEET
HI-MACS[®] STRATO COLLECTION



■ Strato Collection

New sheet collection for 2019 in Europe. It features a distinct stripe effect.

Strato Colours:



Strato Cloud Z001



Strato Wind Z003



Strato Slate Z005



Strato Collection

1 Sheet Specifications:

1-1 Strato Collection is a new 2019 product, available in 12mm thickness.

Group	Colour Code	Colour Name	Thickness	Width	Length	Weight/kg	Sheet per Pallet
Strato Collection	Z001	Strato Cloud	12mm	760mm	3680mm	56.7kg	20
	Z003	Strato Slate	12mm	760mm	3680mm	56.7kg	20
	Z005	Strato Wind	12mm	760mm	3680mm	56.7kg	20

1-2 Strato Collection Sheet Colours / Strato Collection Adhesive Colours

Group	Sheets		Adhesives		Cartridge / PU
	Colour Name	Colour Code	Colour Code	Colour Name	
Strato Collection	Strato Cloud	Z001	H36	Silver	250ml
	Strato Slate	Z003	H22	Perna/Grey	250ml
	Strato Wind	Z005	H16	Alpine/White	250ml

Note:

The adhesive is not developed as filler for repairs. In 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).

1-3 Strato Colour Codes:

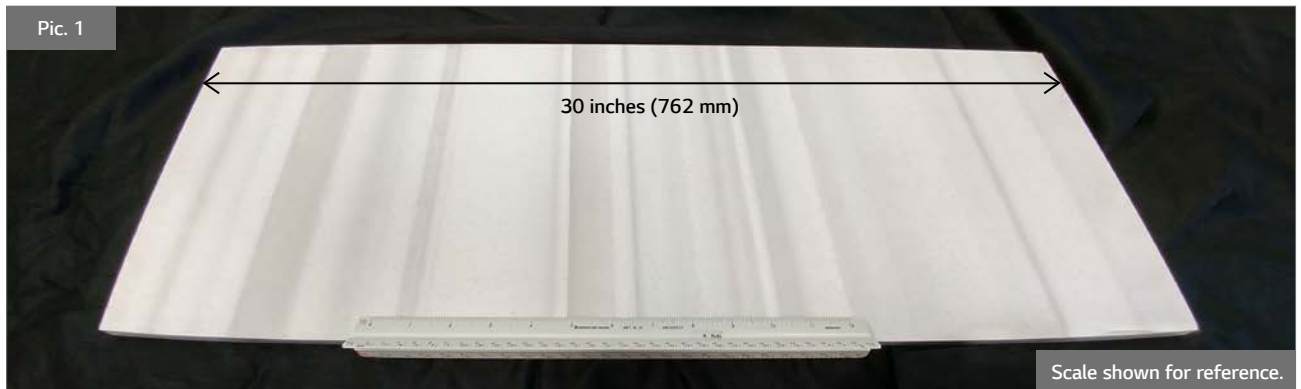
Group	Colour Codes	Colour Name	RAL	NCS	Pantone
Strato Collection	Z001	Strato Cloud			
	Z003	Strato Slate			
	Z005	Strato Wind			

1-4 Strato LRV (Light Reflecting Value):

Group	Colour Codes	Colour Name	LRV
Strato Collection	Z001	Strato Cloud	
	Z003	Strato Slate	
	Z005	Strato Wind	

Fabrication

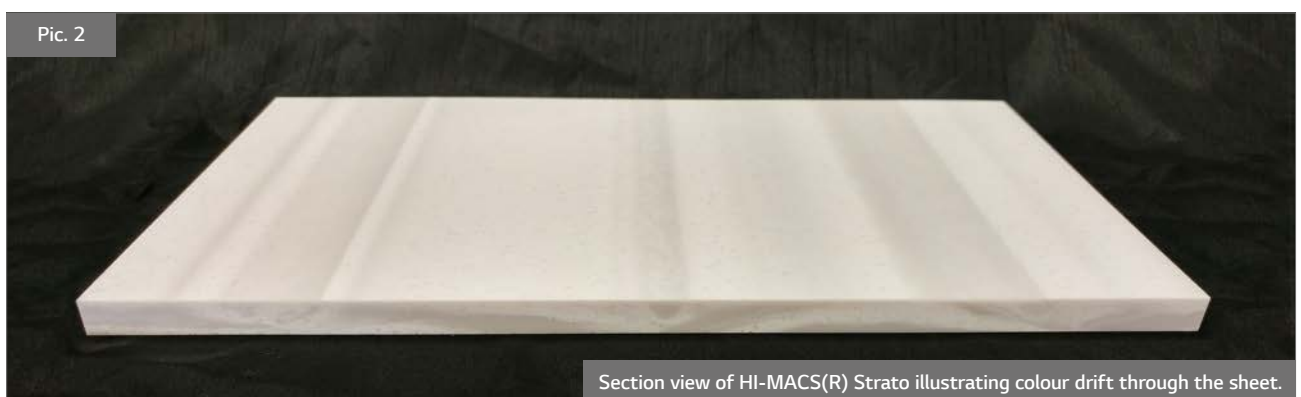
Strato Collection – New Sheet collection features a distinct “stripe” effect that extends from one end of a sheet to the other end of a sheet as shown in the partial-sheet image below, Pic. 1:



Strato Collection material exhibits a greater variation in colour, shading, and pattern than is apparent in samples. Even 300mm square samples and full-sheet photographic images cannot fully capture these variations. If possible allow the customer to view the actual material together with seaming layout examples and sign a “document of understanding”. Otherwise the finished countertop may not be consistent with customer expectations.

Because the stripes can drift slightly as sheets move through early stage manufacturing it is important to order consecutive (sequential) sheets whenever there will be a field seam or a seam creating a “L”- or “U”-shaped countertop. Even with consecutive sheets it’s important to visually verify alignments before beginning fabrication. In some cases rotating one sheet 180-degrees may deliver the desired uniform alignment.

Customer expectations are best managed by fully educating the customer about product characteristics. For instance, the linear striping that appears on the surface doesn’t continue directly through the sheet thickness. Instead, a cross-section of Strato Collection material looks like shown in Pic. 2



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

Due to the stripe design a variation of edge creation is possible, like samples below:



In order to have a finished edge or end that most end-users expect it's necessary to use the "v-groove" or "miter"(45°) method of fabrication. Then the finished edge will appear as seen below:



"L" and "U"-shaped countertop configurations may be more aesthetically pleasing to your customer with a 45-degree corner seam (below) than with the generally-accepted (approved) offset seam. (sample: pic-no.6)



Using the 45-degree seam will result in a seam that spans more than the nominal 600mm countertop depth. Butt seams or simple straight offset seams may not acceptable by end consumer. Show a sample to your customer so they fully understand before fabrication.

When the 45-degree seam is used, a seam reinforcement plate of not less than 150mm, plus additional support perpendicular on either side of the required seam reinforcement plate, is required. This secondary support can be placed at the midpoint of the required seam reinforcement piece. Where no corner support other than wall-mounted cleats is available (such as when there is no corner cabinet) the secondary reinforcement can be placed at the back edges where the countertop meets the wall.

When the 45-degree seam method is used, the inside corner radius is especially crucial because there is significant stress on this point. The image below shows a well-executed inside corner with a full 25mm radius.

Note:

The attention given to maintaining uniform appearance of the stripe pattern through this inside corner radius.

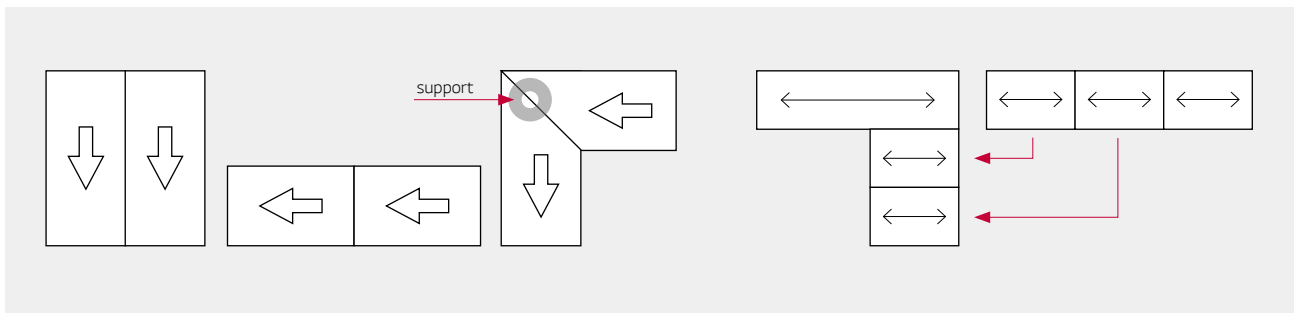
Pic. 7



“U”- or “L”- SHAPED COUNTERTOP

When a countertop or work surface will require a field seam to join one or more sheets together, it is especially important to use consecutive sheets of HI-MACS[®]. However, the stripes can drift slightly as sheets move through early stage manufacturing so it's important to visually verify alignments before beginning fabrication. In some cases rotating one sheet 180-degrees may deliver the desired uniform alignment. Using consecutively numbered sheets is always the best practice when seams are made.

When bonding sheet to sheet double check the best veining possibility according to its veining flowing look. There's no way to determine which method will work best with any particular colour other than to visually evaluate the configurations. LG Hausys strongly advise the fabricator to confirm with the purchaser and end user of the final look and understand these considerations before commencing work.

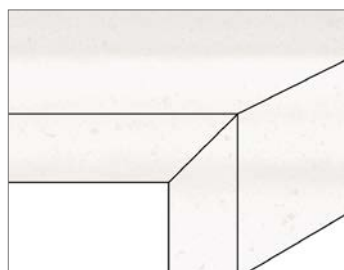


Hint:

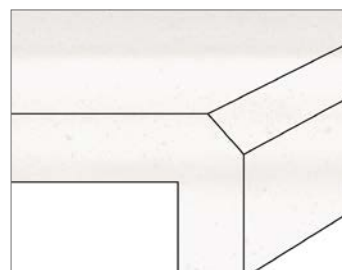
Whatever counter connection will be chosen, ensure a proper support to avoid any lowering or slop of load during later times.

Edge Treatment Requirement

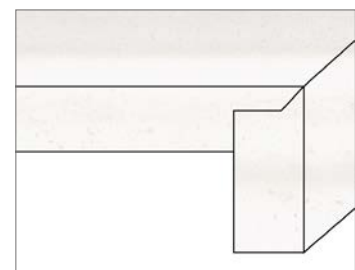
To let the pattern flow around the edges a 45° angled cut of the edge or an alternative rebate is one of the best solutions.



Standard v-grooved



Standard with bevel



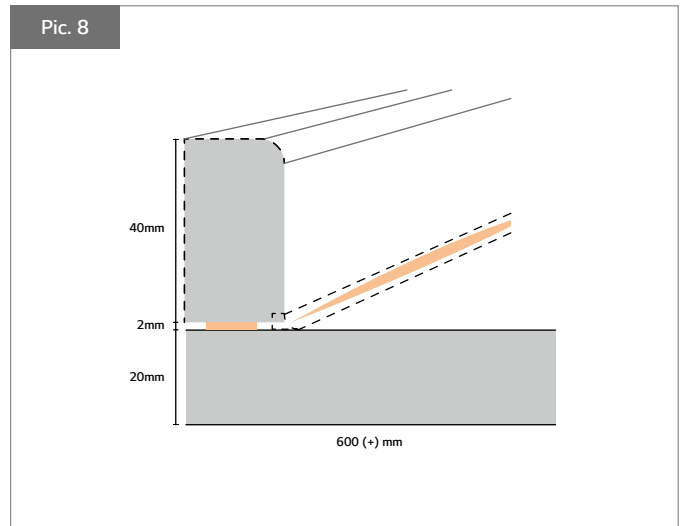
Standard V-grooved and angled

For the bonding process of the edges please follow the instructions of edge treatments.

NOTE: We strongly advise the fabricator clearly explains and demonstrates to the purchaser and end user of the characteristics of this product before signing off the work.

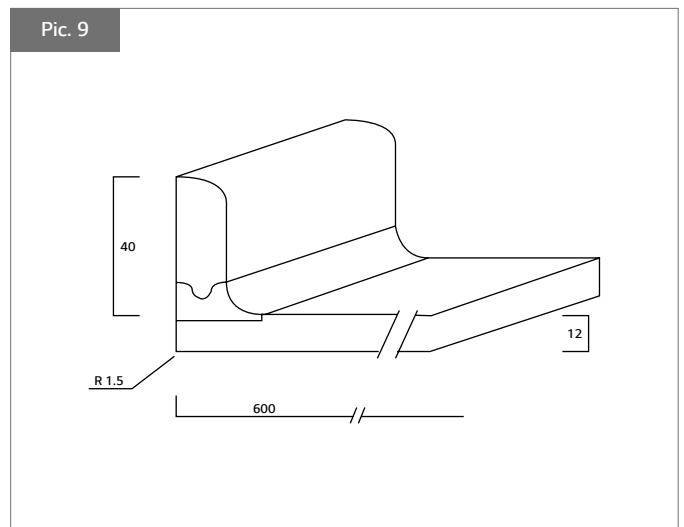
BACKSPLASH

When using standard backsplash prepared with a rebate of 2mm x 2mm: best to use transparent silicone to finish off.



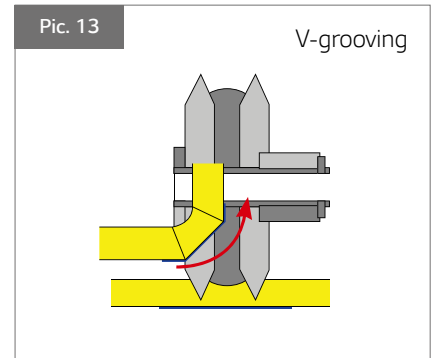
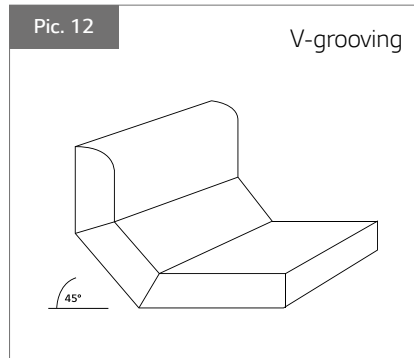
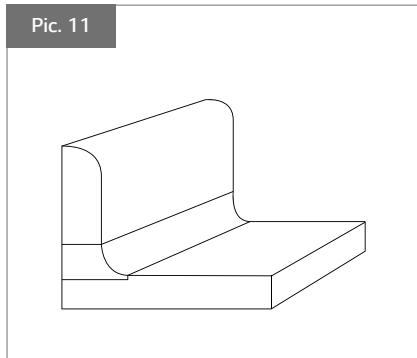
COVERED BACKSPLASH

In some cases it's possible to construct a covered backsplash as shown below but, because of the random colour distribution through the sheet thickness, results may not be consistent



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.



When preparing a curved upstand or downturn, customers may not accept the final result. One may not compare, though with UNI colours used in the kitchen market. A downturn or an upstand are best achieved with a 45° angle or a profiled folding option – see picture 3 (V-grooving).

Overhangs

For respective measures of oversized table tops or counter tops do proper support according the expected weight as well as to take the design into consideration. Up to 50mm no support needed. From 50mm up to 150mm a second layer is needed. Over 150mm corbels are needed.

Note:

Be aware that HI-MACS[®] always needs a proper and strong sub-construction according to its application to avoid any kind of unexpected deformation over time.

2 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 Step	Micron Sandpaper	Grid Sandpaper	Micron Sandpaper	Grid Sandpaper	Micron Sandpaper	Grid Sandpaper
Step 1	100/80 μ	150/180	100/80 μ	150/180	100/80 μ	150/180
	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	"Finess-It™" Finish- Component	1200
					take dust away	
Step 7						1500
						1800
						2500

3 Thermoforming

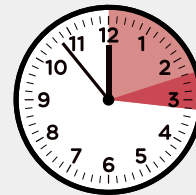
To prepare the workpieces, follow the standard thermoforming process.

For the Thermoforming process we recommend using a pre-heating oven with double sided heating plates. Run pre-heating up to +175°C before placing the workpiece in the oven.

Best Heating Temperature:
165°C – 170°C



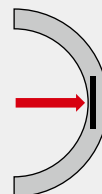
Best Heating Time:
ca. 18 min.



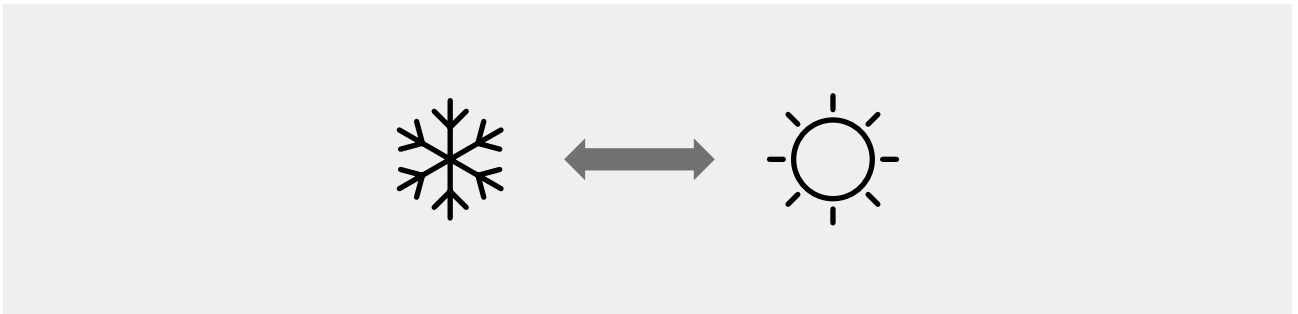
The heating time is similar to the general heating time of HI-MACS[®] products for the thermoforming process. The classification of a minimum radius for Strato Collection is approx. $\geq 85\text{mm}$. Be aware that any undertaking of recommended radii can cause some colour change or create some cracks. For any technical enquiry 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

Ri $\geq 85\text{mm}$

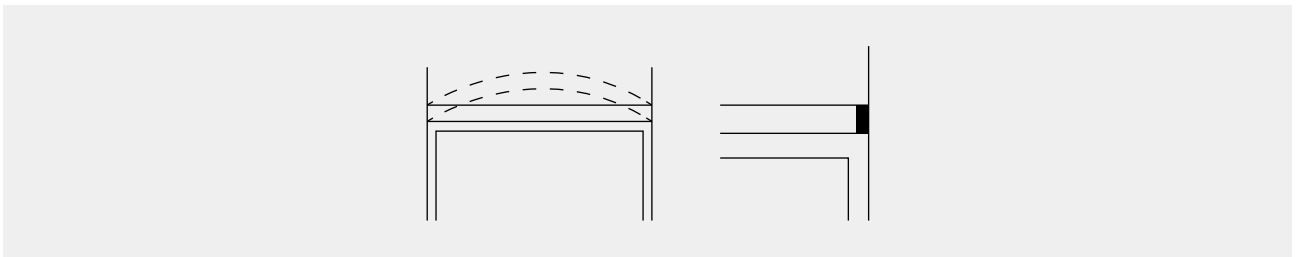


4 Thermal Expansion



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 1.5mm per linear meter for expansion and contraction



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

$$\Delta T = 48 \times 10^{-6} / K$$

5 Quality Check

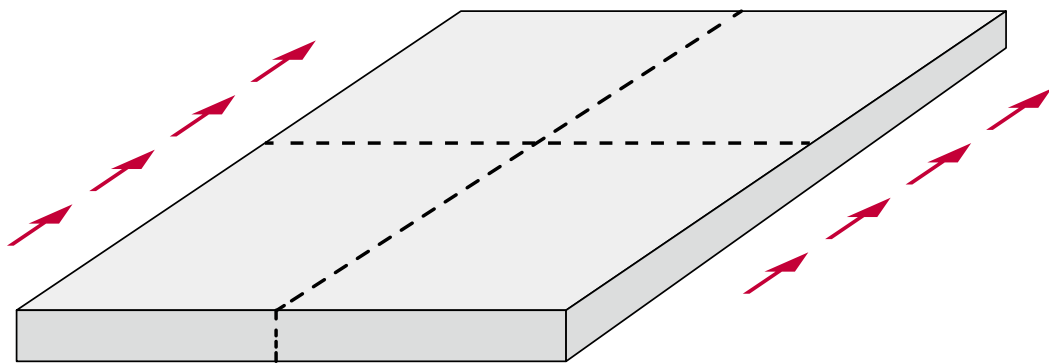
- Check any fabricated item on quality aspects before leaving the workshop.
- Any mistakes can be repaired in the workshop at the time of fabrication. Repairs needed at a later date will be more costly and time consuming.

Hint:

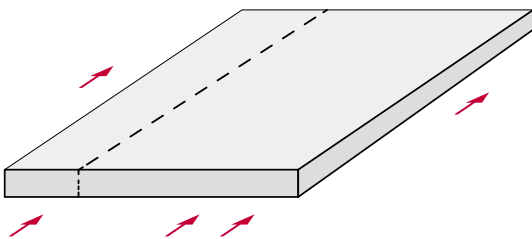
When using several sheets for doing one job ensure a continuous flow of sequential numbers as well as the same production flow.

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°)

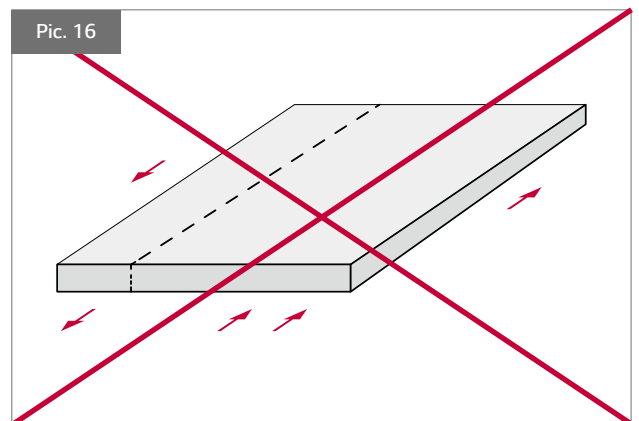
Pic. 14



Pic. 15



Pic. 16



Important:

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

Interior Solid Surface Material

HI-MACS[®]
Natural Acrylic Stone™

■ LG Hausys Europe GmbH

European Headquarters:
LG Hausys Europe GmbH
Lyoner Ste. 15
60528 Frankfurt
Germany
info@himacs.eu
www.himacs.eu

