

HI·MACS

The shape of your ideas

HIMACS ULTRA COLLECTION

TDS - TECHNICAL DATA SHEET

Solid Surface Material

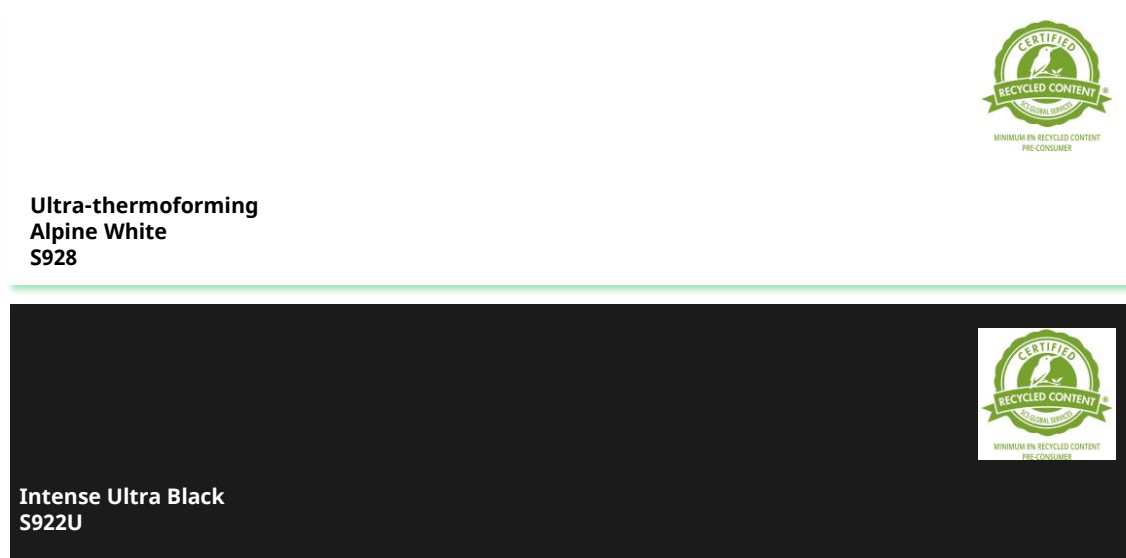
At the forefront of innovation as always, LX Hausys recently introduced two new products. First HIMACS Ultra-Thermoforming, an innovative formula that pushes the boundaries of solid surface shaping to a whole new level, with 30% more thermoplastic capabilities - the biggest innovation for the Solid Surface history since its inception in 1967. Now, HIMACS Intense Ultra, combining the characteristics from two disparate worlds: Intense Color Technology and Ultra-Thermoforming.

1. Product Specifications

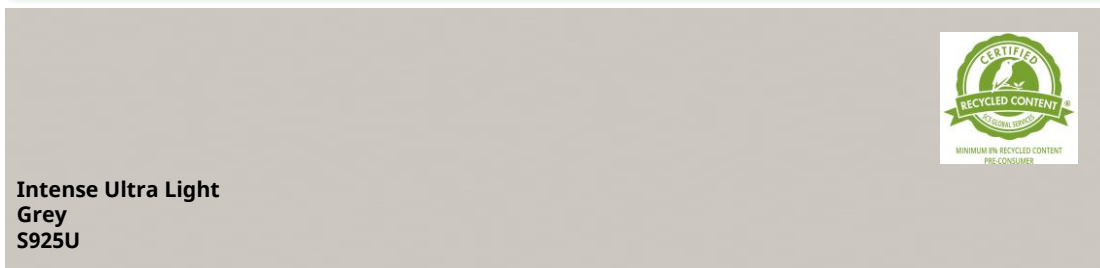
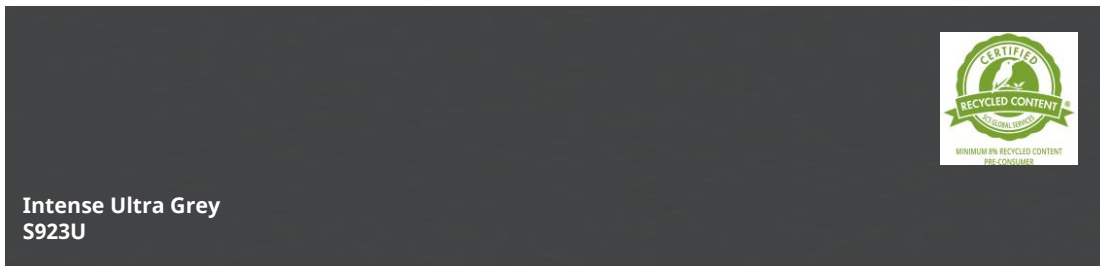
Available colours



Available colours - Full sheet view



Available colours - Full sheet view



2. Sheet Specifications

GROUP	COLOUR CODE	COLOUR NAME	SHEET THICKNESS	SHEET SIZE (Width x Length)	m ² PER SHEET	WEIGHT PER SHEET	WEIGHT PER m ²	SHEETS PER PALLET
ULTRA THERMOFORMING / INTENSE ULTRA	S928*	Ultra Thermoforming Alpine white	12 mm	760mm x 3680mm	2,7968	55,38 kg	19,80 kg	15
	S922U*	Intense Ultra Black	12 mm	760mm x 3680mm	2,7968	55,38 kg	19,80 kg	15
	S923U*	Intense Ultra Grey	12 mm	760mm x 3680mm	2,7968	55,38 kg	19,80 kg	15
	S924U*	Intense Ultra Dark Grey	12 mm	760mm x 3680mm	2,7968	55,38 kg	19,80 kg	15
	S925U*	Intense Ultra-Light grey	12 mm	760mm x 3680mm	2,7968	55,38 kg	19,80 kg	15

* S928 / S922U / S923U / S924U / S925U contains minimum 8% of pre consumer recycled plastic resin (certificate# SCS - RC - 09990)

GROUP	COLOUR CODE	COLOUR NAME	SHEET THICKNESS	SHEET SIZE (Width x Length)	m ² PER SHEET	WEIGHT PER SHEET	WEIGHT PER m ²	SHEETS PER PALLET
ULTRA THERMOFORMING / INTENSE ULTRA	S922U	Intense Ultra Black	6 mm	760mm x 2490mm	1,8924	19,87 kg	10,49 kg	30
	S922U	Intense Ultra Black	6 mm	910 mm x 2490 mm	2,266	23,79 kg	10,49 kg	30

GROUP	COLOUR CODE	COLOUR NAME	SHEET THICKNESS	SHEET SIZE (Width x Length)	m ² PER SHEET	WEIGHT PER SHEET	WEIGHT PER m ²	SHEETS PER PALLET
ULTRA THERMOFORMING / INTENSE ULTRA	S922U	Intense Ultra Black	9 mm	760mm x 3680mm	2,7968	43,75 kg	15,64 kg	20
	S922U	Intense Ultra Black	9 mm	910 mm x 3680 mm	3,3488	52,37 kg	15,64 kg	20

3. Sheet & Matching adhesives

SHEET			ADHESIVE		
GROUP	COLOUR CODE	COLOUR NAME	COLOUR CODE	COLOUR NAME	PACKAGING UNIT
ULTRA THERMOFORMING / INTENSE ULTRA	S928	Ultra Thermoforming Alpine white	H016	ALPINE WHITE	45ml / 250ml
	S922U	Intense Ultra Black	H134	INTENSE BLACK	45ml / 250ml
	S923U	Intense Ultra Grey	H053	CONCRETE GREY	45ml / 250ml
	S924U	Intense Ultra Dark Grey	H135	INTENSE DARK GRAY	45ml / 250ml
	S925U	Intense Ultra Light grey	H156	INTENSE LIGHT GREY	45ml / 250ml

4. LRV , PANTONE, RAL Classic & NCS

GROUP	COLOUR CODE	COLOUR NAME	LRV	PANTONE	RAL Classic	NCS
ULTRA THERMOFORMING / INTENSE ULTRA	S928	Ultra Thermoforming Alpine white	85,12	11-4201 TPX	9003	-
	S922U	Intense Ultra Black	6,54	419C	9005	S9000-N
	S923U	Intense Ultra Grey	9,99	19-4104 TPG	7016	S8000-N
	S924U	Intense Ultra Dark Grey	7,5	19-4006 TPG	9017	S8500-N
	S925U	Intense Ultra Light grey	40,76	14-4107 TPG	9006	S2500-N

5. Fabrication guidelines

The use Ultra-thermoforming HIMACS is equivalent to the standard HIMACS quality in terms of fabrication and installation requirements.

- Always manipulate the product with care to avoid scratches or marks on both side of the sheet.
- Use the appropriate cutting tools to ensure the expected cut.
- Assemble the product on the same direction (production flow).

Bonding :

Ultra Thermoforming bonding process is also equivalent to standard HIMACS bonding one. Important point to control concern the potential whitening of edges, we recommend to handle seaming with care to avoid this effect, the use of the appropriate cutting equipment is primordial.

- **Make and keep edges smooth and clean before bonding**

Improved colour at cutting surface



S022
Black

S922
Intense
Ultra Black

HIMACS Ultra thermoforming, is suitable for small radius, and small curves.



S928 Ultra-
Thermoforming Alpine
White



S922U Intense Ultra Black



S923U Intense Ultra Grey

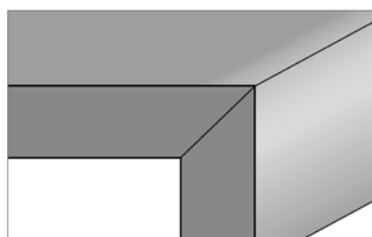


S924U Intense Ultra Dark Grey

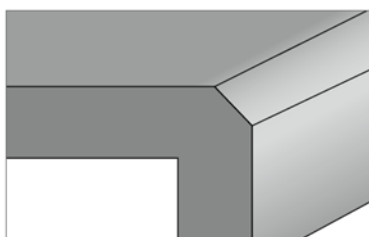
6. Edge & Backsplash

6.1 Edge bonding flow:

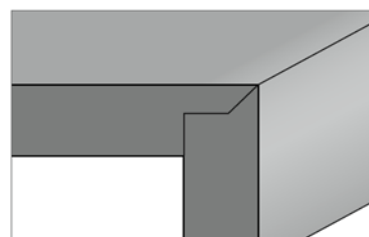
To let the pattern flow around the edges a 45° angled cut of the edge or an alternative rebate is one of the best solutions.



Standard V-grooved



Standard with bevel



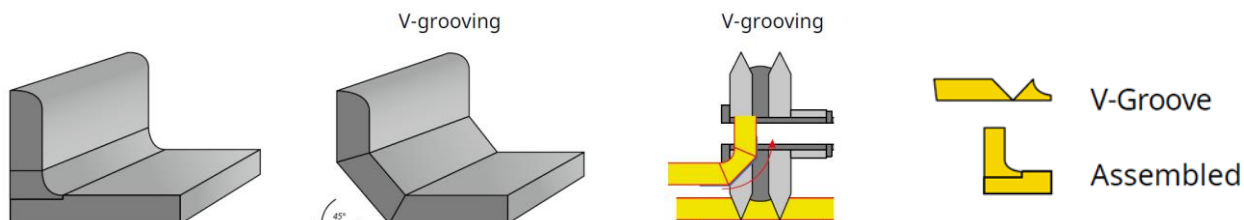
Standard V-grooved and angled

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

HIMACS strongly advise the fabricator to confirm that the purchaser and the end user understand these considerations before proceeding whilst best to prepare a sample and let this design sign off.

6.2 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.



HIMACS sheets are delivered with a sanded backside, it is strongly recommended for translucent application to sand it smooth or to trim edges to avoid any imperfection. Check all edges before the bonding process, ensure that no cracks or scratches exists. After Sawing, whitening effect can appear.

7. Sanding (finishing)

		Standard recommendation					
FINISH-LEVEL	MATT-FINISH		SEMI-GLOSS-FINISH		HIGH-GLOSS-FINISH		
HIMACS 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™ Maroon 7447	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™ Maroon 7447	9 µ	600/800	
			take dust away		take dust away		
Step 6				industrial paper towel	Finesse-it™ Finish-component	1200	
			take dust away		take dust away		
Step 7						1500	
						1800	
						2500	

8. Thermoforming

To prepare the workpieces, follow the standard thermoforming process (for more information's see FM22EU, 7.15 Thermoforming)

For Thermoforming process to recommend best by using a pre-heating oven with double sided heating plates.

Heating Temperature:

155°C - 175°C



Heating Time:

12 - 30 min.

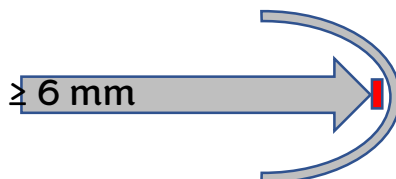


The heating time is equivalent to the general heating time of HIMACS products for the thermoforming process.

- The classification for 2D application, of a minimum radius for ULTRA THERMOFORMING / INTENSE (12mm) ≥ 6 mm.
- Be aware that any undertaking of recommended radii can cause some colour change or create some cracks.

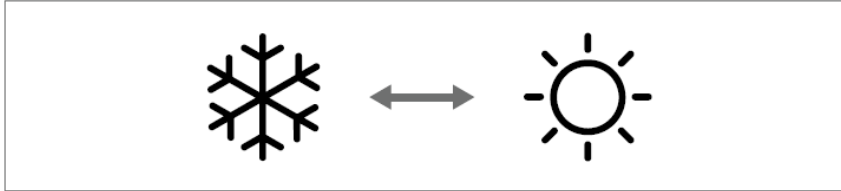
For any technical inquiry contact your local technical support.

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



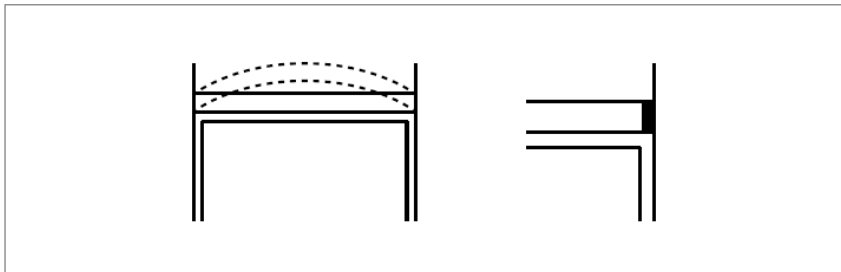
**ULTRA
THERMOFORMING
/ INTENSE**

9. 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 HIMACS according to norm DIN EN 14851:

$$\Delta t = \text{ca. } 38 \times 10^{-6} / \text{K}$$

10. Quality Check

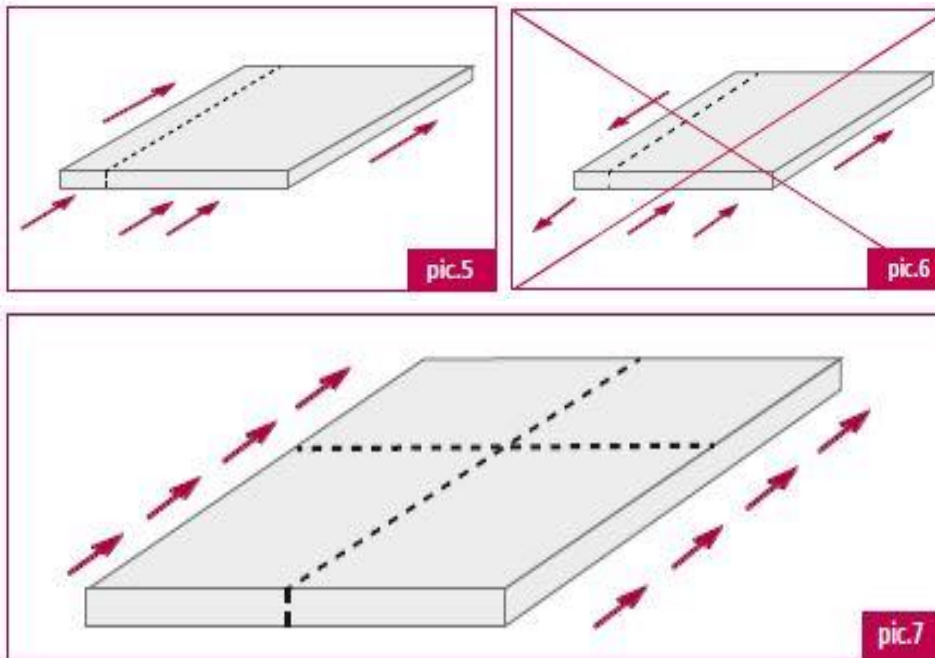
- Check any fabricated item on quality aspects before leaving the workshop.
- In case of any mistakes, it easily can be repaired in the workshop and keeps the time of re-work very low.
- Any damage or any mistake which will be recognized later will make the fixing much more expensive.

Important information:

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

11. Summary of important information :

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°).



- HIMACS ULTRA THERMOFORMING is equivalent material as any other HIMACS 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.
- The 15 Year Limited Installed Warranty does not cover any failures due to fabrication or installation mistakes.
- It is Fabricator's responsibility to find the best assembling arrangement of the design, layout as samples show above.
- Design may can change in size when turning into a curve. As smaller the radius becomes as wider the veins gets but even more cautions to be taken, when using dark colours to avoid unexpected whitening.

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