



Website
www.himacs.com



Play Store
Google



App Store
Apple



HI-MACS®

FREE YOUR CREATIVITY



LG Hausys

www.himacs.com

HI-MACS®

Free your Creativity

Acrylic Solid Surface

LG Hausys

LG Hausys HQ(Seoul, Korea)
Mail: surfaceinfo@lghausys.com

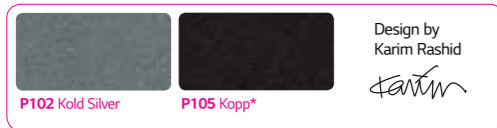
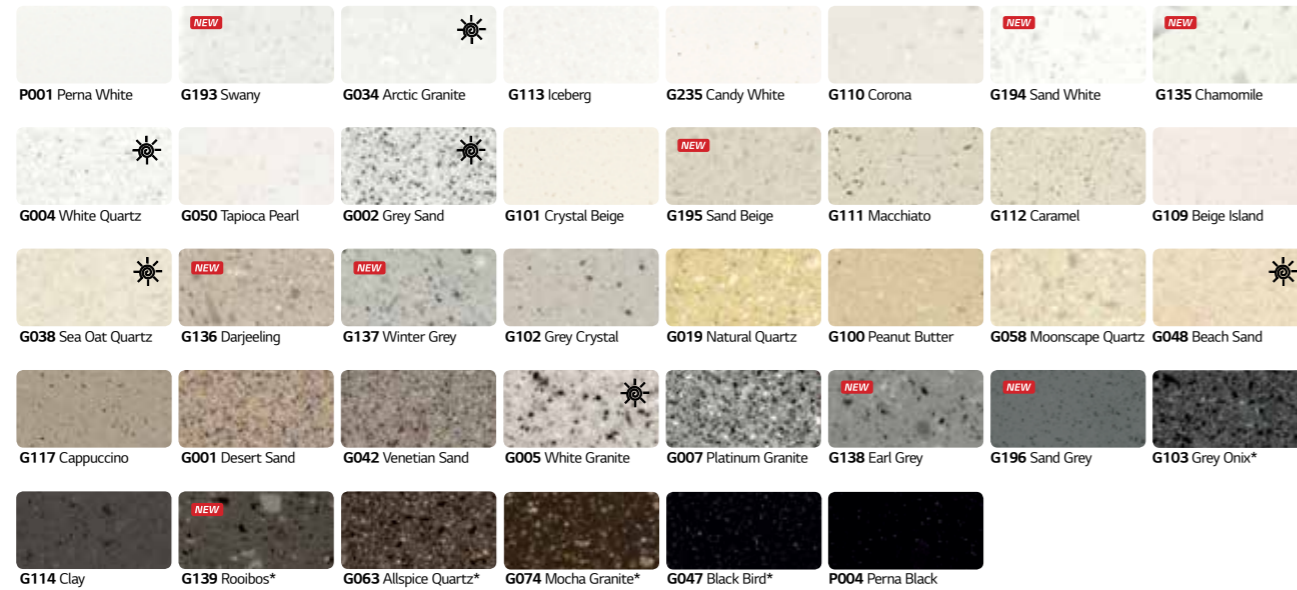
LG Hausys America, Inc. (Atlanta)
LG Hausys Europe GmbH (Frankfurt)
LG Hausys China Trading Co., Ltd. (Shanghai)
LG Hausys Russia, LLC (Moscow)
LG Hausys India, Ltd. (New Delhi)
LG Hausys Middle East Office (Dubai)
LG Hausys Turkey Office (Istanbul)
LG Hausys Indonesia Office (Jakarta)
LG Hausys Taiwan Office (Taipei)
LG Hausys Japan Office (Tokyo)

LG Hausys

Publisher : LG Hausys-Surface Material Division
Planner : Min Kang
Coordinator : Seung-won JUNG

Colors

Granite A huge selection of textures and colors. Natural, elegant and perfect to combine.



Aster(Galaxy) With transparent grains and mother of pearl shimmer, as if from another world.



Volcanics Full of depth and mysticism, akin to a precious natural stone but with all of the advantages of "Natural Acrylic Stone".



Marmo You will be captivated by its sophisticated texture, reminiscent of marble.



Colors are key in design. Elegant white, warm Toffee Brown or mystical Cima. We have whatever color you want - it's your choice.

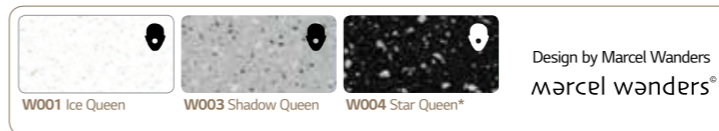
Solid From elegant to extravagant, classic to ultracontemporary - this is a limitless collection.



Lucent When combined with precisely positioned light sources, the translucent pastel shades become transformed into dramatic design "highlights".



Lucia Introducing the first Marcel Wanders' range of surface materials designed for HI-MACS and produced by LG Hausys. A combination of mineral elements give definition to three poetic characters: meet the 'Star Queen,' the 'Ice Queen' and the 'Shadow Queen.' Full of personality, these surface solutions evolve from a set of powerful polarities.

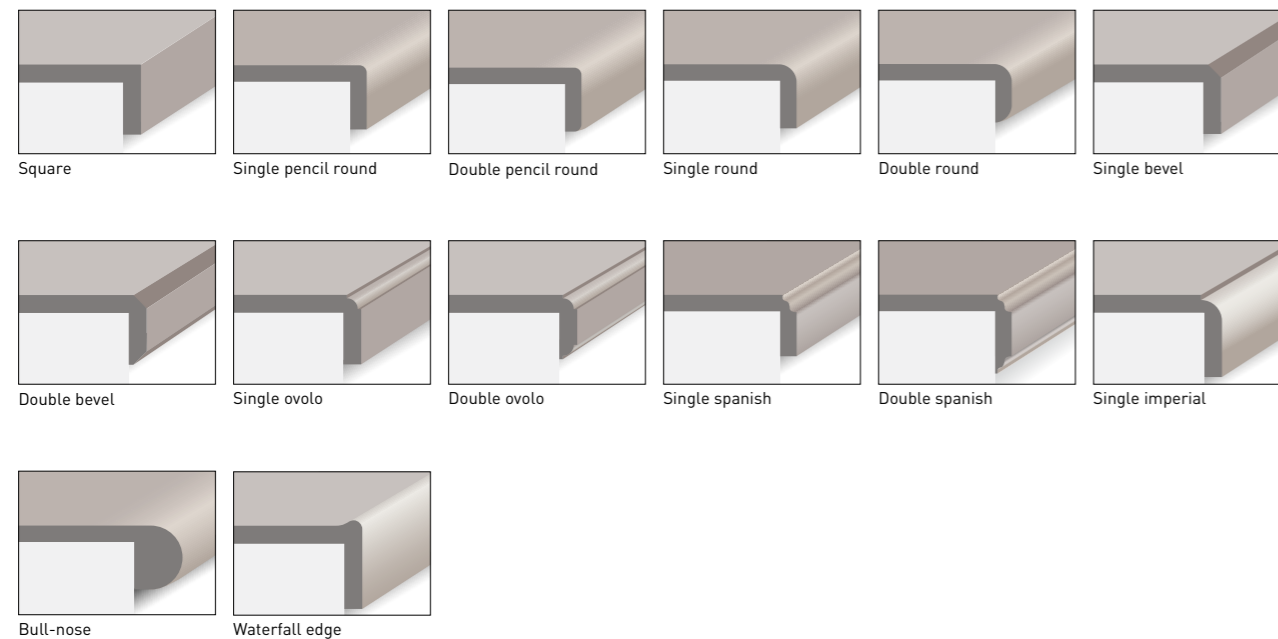


The basic HI-MACS® material is identical for every color, although darker hues have a higher percentage of natural pigments, which need more careful care and attention.
 * Colors indicated with a * are more suitable for surfaces which are subject to less wear and tear and are therefore used more often for contrasts or inlay work. There may be some slight variation in color between the illustrated and actual colors due to printing techniques.
 * Suitable for exterior use.
 ≡ Marmo is a randomly veined product, specific fabrication guidelines need to be followed. Ask your sales partner for more information.
 Color may vary slightly from this sample.

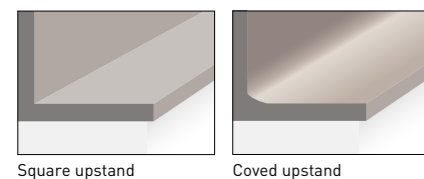
Straight, curved, rectangular, baroque ... any shape you can imagine.

Fine culinary artistry is celebrated in the kitchen. The demands are often exacting when it comes to handling high-quality foods and top kitchen equipment. The requirements in terms of functionality, durability, robustness, as well as aesthetics and comfort, simply couldn't be more demanding: right here in the heart of the house.

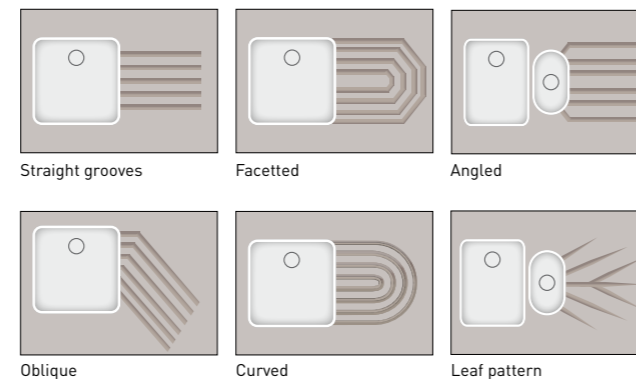
Edge profile examples



Splashbacks



Drainer groove examples



Care and Maintenance

HI-MACS® is hard-wearing, durable and extremely resistant to stains and is therefore very easy to look after. Below are a few simple tips and hints for caring for HI-MACS® to help maintain its exceptional quality for many years to come.

General day-to-day stains

HI-MACS® is a completely homogenous material. As it does not have any pores, you can simply and easily clean it with a damp cloth or sponge and a mild detergent. You can also use a domestic scouring agent on all matt finishes. It is useful to wipe your surface occasionally with a scouring agent or wet sponge to retain the even finish of your product.

Burn marks

Small burn marks or marks caused by nicotine can simply be removed using a scouring agent or an abrasive sponge. Should this give the high-gloss finish a matt appearance, rubbing the surface with a scouring pad will quickly return it to its high-gloss state.

Hot objects and boiling water

Hot saucepans or pots straight out of the oven or from the hob should not be laid directly on the HI-MACS® surface. Place a mat or board underneath to prevent any damage to your product. If you pour boiling liquids into HI-MACS® sinks or basins, you should also pour in cold water at the same time. This also applies to the use of boiling water taps.

Acidic cleaning agents

A number of cleaning agents contain acids, such as methyl chloride or acetone. You should avoid using these on a HI-MACS® surface. Should one of these products accidentally come into contact with the material, as a precautionary measure you should rinse the surface with soapy water to prevent any discolouring taking place.

Tougher stains

Tougher stains, caused by food colouring, tea or fruit juice can easily be removed using a bleaching agent (do not leave in contact with the work surface for more than five minutes). Clean the surface with a domestic all-purpose cleaner and rinse with clean water. You can also use a scouring agent on matt finishes. Nail varnish can easily be removed with nail varnish remover (acetone-free) or a scouring agent.

Sharp objects

HI-MACS® copes effortlessly with the wear and tear of everyday life, however pointed or sharp-edged objects can leave cuts or scratches on the HI-MACS® surface. You can repair smaller cuts and scratches without too much trouble but we recommend the services of a professional for especially deep cuts.

Resistant for your benefit.

HI-MACS® is extremely hard-wearing and durable and transforms your kitchen or bathroom into a universally functional room.

TEST SUBSTANCE	APPLICATION TIME	EVALUATION OF G02 CHANGES	EVALUATION OF S06 CHANGES
Acetic acid	16h	no change	no change
Citric acid	16h	no change	no change
White wine, red wine	16h	no change	no change
Cola drinks	16h	no change	no change
Instant coffee	16h	no change	no change
Black Tea	16h	no change	no change
Blackcurrant juice	16h	no change	no change
Cream	16h	no change	no change
Water	16h	no change	no change
Butter	16h	no change	no change
Olive Oil	16h	no change	no change
Mustard	16h	no change	no change
Salt	16h	no change	no change
Onions	16h	no change	no change
Common household disinfectant	16h	no change	no change
Cleaning agent	16h	no change	no change
Cleaning solution	16h	no change	no change

Specification

SHEET SPECIFICATION

Sheet thickness in mm	Sheet width in mm	Sheet length in mm
6	760	2,490
12	760	3,680

*Special customized order to be prediscussed

Weight/ft ²	Thickness	Solids result	Unit	Granite result	Unit
HI-MACS®	6mm	1.14	1bs	1.08	1bs
	12mm	4.55	1bs	4.32	1bs
	6mm	0.52	kg	0.49	kg
	12mm	2.07	kg	1.96	kg

Weight Sheets	Thickness	Width/Length	m ² Sheet	kg/Sheet
HI-MACS®	6mm	760/2,490	2	20-21
	12mm	760/3,680	3	57-61

CHEMICAL RESISTANCE

according to DIN 68861 & KIN 68930 Tab. 1

Test material	Assessment	Assessment
G25 defects	S06 defects	
Acetic acid (vinegar)	no effect	no effect
Citric acid (lemon)	no effect	no effect
Sodium carbonate	no effect	no effect
Ammoniac water	no effect	no effect
Ethyl alcohol	no effect	no effect
White/Red/South wine	no effect	no effect
Beer	no effect	no effect
Cola-drinks	no effect	no effect
Instant coffee	no effect	no effect
Black tea	no effect	no effect
Blackcurrant juice	no effect	no effect
Cream	no effect	no effect
Water	no effect	no effect
Benzene	no effect	no effect
Acetone	3	3
Ethyl-butyl acetate	3	3
Butter	no effect	no effect
Olive oil	no effect	no effect
Mustard	no effect	no effect
Salt	no effect	no effect
Onion	no effect	no effect
Lipstick	no effect	no effect
Disinfectant	no effect	no effect
Black ballpoint	2	2-3
Stamping ink	1	1
Household cleaner	no effect	no effect
Cleaning agent	no effect	no effect
Use group according to DIN 68861	1B	1B

Assessment according to DIN 68930 Tab.1
Other work top spaces: ues group : 1C Fulfill of requirements+

FEATURES

- Wide range of color and pattern choices
- Non-porous structure
- Stain and chemical resistance
- Effortless fabrication and seamless installation

APPLICATIONS

- Kitchen tops
- Vanity tops
- Wall decorations
- Laboratory tables
- Working tables
- Office desks
- Commercial interiors

SPECIFICATION DATA SHEET

Specification	Unit	Result		Test method	
		Solid	Granite		
Density	lbs / in	0.063	0.06	ASTM D 792	
Specific gravity	-	1.75	1.75	ASTM D 792	
Thermal expansion	m / m / °C	35.0X10 ⁶	33.0X10 ⁶	ASTM D 696	
	X10 ⁶ in / in / F	1.20	1.10	ASTM D 696	
Expansion	mm	<0.05	<0.05	DIN 318	
Tensile strength	kg / cm	390	390	ASTM D 638	
Flexural strength	kg / cm	790	790	ASTM D 790	
Hardness rockwell	-	90	88	ASTM D 785	
Barcol	-	63	61	ASTM D 785	
Pencil	H	5	5	KSD 6711	
Izod impact notched strength (ball drop)kg/cm / cm	6mm	% 23°C	0.05	0.05	ASTM D 570
	12mm	in / 1lbs	47.20	43.30	NEMA-LDI-2.15
	12mm	mm	<1,400	<1,400	DIN EN 438, part 2, pt.12, '92
(with impact test apparatus)	12mm	N	25	25	DIN EN 438, part 2, pt.11, '92
Water absorption	6mm	% 23°C	0.05	0.05	ASTM D 570
	12mm	24hrs	0.04	0.05	ASTM D 570
Slippery resistance	-	>0.32-0.9	>0.32-0.9	GMG 100(replaces R9)	
Climate change resistance	°C	positive	positive	AMK	
Heat distortion temperature	°F	203-221	203-221	ASTM D 648	
-	°C	95-105	95-105	-	
Dry heat (pan bottom)	°C	≤100	≤100	DIN 68 861, part 7, 04-'85	
Wet heat (pan bottom)	°C	7A	7A	DIN 68 861, part 8, 04-'85	
Cigarette burn resistance	-	6C	6B	DIN 68 861, part 6, 04-'85	
Chemical impact	-	1B	1B	DIN 68 861, part 1, 12-'81	
Scratch resistance	-	4D	4B	DIN 68 861, part 4, 11-'81	
Stain recovery	%	98	98	KS F 4810-1986	
Electrostatic	>1X1012Ω	insulating	insulating	DIN IEC 1340-4-1, 04-'92	
Weather resistance	ΔE	no change	no change	ASTM D 1499	
	(1,000hrs)	-	-	-	
Xenon (light resistance)	-	better than 6	better than 6	DIN 53 387, 04-'89	
Hygienic	-	suitable	suitable	DIN 53 387, 04-'89	
Food contact	-	suitable for all colors	available in 2003	LMBG §31 Food contact safety	
Fire resistance	-	B1	B1	BAM-certificate DIN 4102-1	

WARRANTY & SERVICES

All HI-MACS® products are carefully manufactured to ISO 9001 quality standards and backed by a full technical service support team.
A limited 10 year installed warranty applies to all HI-MACS structures provided they have been fabricated and installed by an authorized fabricator and correctly maintained according to recommended guidelines

Fabrication & Installation

HANDLING

HI-MACS® weight differs based upon thickness and length. In a single sheet, HI-MACS® should be carried vertically to prevent from breaking or bending. Multiple sheets should be supported by a pallet.

SAFETY GUIDE

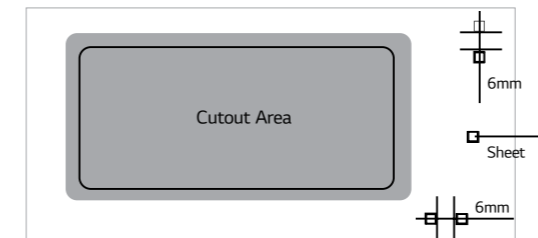
When working with HI-MACS®, one needs to observe common safety procedures and practices.
- Check all electrical tools prior to use
- Always wear safety goggles
- Wear gloves, shoes, and dust filtering masks
- Only use sharp cutters
- Work in a light, well-ventilated area

DUST

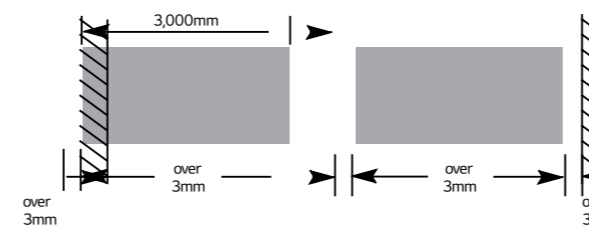
Proper breathing filters and ventilation are necessary when working with HI-MACS®, as breathing dust can be harmful.

CUTTING

HI-MACS® expands and contracts according to temperature and humidity. Installers should keep this in mind when measuring. When marking cutouts, leave approximately 1/4 inch of space.



When installing at the wall side or joining between sheets, leave approximately 1/4 inch of space.



BREAKAGE

Cracks can occur due to the following reasons :
- The support for HI-MACS® is not level
- The joint is not finished smoothly
- Adhesive is not applied evenly
- Proper length or spacing is not left during fabrication

STORAGE

Store HI-MACS® indoors in an area with proper ventilation. HI-MACS® should not be placed directly on the floor. Avoid high temperatures or high humidity.

LINE CUTTING

Table Saw is required for precision and large quantity cutting of HI-MACS®. Carbide or diamond blades are recommended for best performance. Cutting speed can differ, but 2-3M/min is recommended. Table Saw with rollers is commended for precise long cuts.

OTHER POWER SAWS

Smaller hand-held saws may also be used with HI-MACS®. Circular saw for short straight cuts. Jig saws for small curved cuts. Care and experience is required for making cuts with hand-held saws.

RADIUS CUTTING

Precise and smooth radius cutting of HI-MACS® is possible with the use of a router and a template. This is best for routing for sink installation. A minimum of 1/2 inch of space should be allowed when making sink cut outs with a router.

FINISH CUTTING

With the proper bits, numerous decorative or smooth edges may be achieved with the use of a router. For more complicated finishes, a template is recommended.

DRILLING AND PROGRAMMABLE TABLE ROUTERS

HI-MACS® may be used on Programmable Table Routers for custom, large quantity and precision processing. HI-MACS® is suitable for use with any hole making device. 1/8 of an inch of space should be allowed when working with this type of equipment.

HI-MACS ADHESIVE

Warning : Adhesive are flammable. Proper safety precautions should be taken to avoid firing.

SELECTION OF ADHESIVE ACCORDING TO PRODUCT TYPE

Product	Adhesive	Characteristics
HI-MACS®	Designated adhesive for HI-MACS®	Start the finish process after 2-3 hours for hardening
HI-MACS® + Wooden Plate Veneer	Neoprene rubber type	Press at semi dry condition after applying on both side. Suitable for the back-reinforcing veneer.
	Silicone caulking type	Effective in the installation for counter top. Easy process, high impact resistance and elasticity.
	Cyanoacrylate type	Effective at the adhesion of small products.
HI-MACS® + Metal	Epoxy type (2Component mixed type)	More than 24hour hardening on pressing after applying the complete mixture of the main component and hardner.
	Acryl type (2Component mixed type)	Press down the facing area after applying the main component and hardner separately. Easy processing and short adhesion time.