

Interior Solid Surface Material

HI-MACS[®]
Natural Acrylic Stone™

TDS – TECHNICAL DATA SHEET

CONCRETE COLLECTION

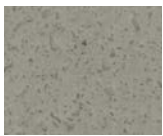


The Concrete Collection is a range embodying the rough texture of raw concrete with a pattern design which calmly and delicately permeates the artificial stone.
The HI-MACS® Concrete Collection came from an initial desire to discard existing ideas, and go back to the bare essentials.
The Concrete Collection challenges modern extravagance, and returns to an industrial era where basic colours provide a clean canvas to build on.

The Concrete Collection fulfills today's design trends.

1. Products

1.1 Available Colours



Urban Concrete
G554 [20/12/9/
6 mm]



Steel Concrete
G555 [12/9/6 mm]



Chic Concrete
M551 [12 mm]



Shadow Concrete
M552 [12 mm]



Ebony Concrete
M553 [12 mm]

NEW



Snow Concrete
G556 [12 mm]



Cloud Concrete
G557 [12 mm]

2. Product Specifications

2.1 Available Products: Product Code – Colour – Size – Weight

GROUP	COLOUR CODE	COLOUR NAME	SHEET THICKNESS	SHEET SIZE (WIDTH X LENGTH)	M² PER SHEET	WEIGHT PER SHEET	WEIGHT PER M²	SHEETS PER PALLET
Concrete	G556	Snow Concrete	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	G557	Cloud Concrete	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M551	Chic Concrete	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M552	Shadow Concrete	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M553	Ebony Concrete	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	G554	Urban Concrete	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	G555	Steel Concrete	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15

2.2 Product: Sheet – Adhesive

GROUP	SHEET		ADHESIVE		
	COLOUR CODE	COLOUR NAME	COLOUR CODE	COLOUR NAME	PACKAGING UNIT
Concrete	G556	Snow Concrete	H02	Arctic White	45 ml / 250 ml
	G557	Cloud Concrete	H132	Cloud	45 ml / 250 ml
	M551	Chic Concrete	H114	Pantheon	45 ml / 250 ml
	M552	Shadow Concrete	H114	Pantheon	45 ml / 250 ml
	M553	Ebony Concrete	H115	Colosseum	45 ml / 250 ml
	G554	Urban Concrete	H22	Perna Grey	45 ml / 250 ml
	G555	Steel Concrete	H114	Pantheon	45 ml / 250 ml

Note: 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).

2.3 Product: Sheet – Colour Codes: RAL – NCS – Pantone

GROUP	COLOUR CODE	COLOUR NAME	RAL	NCS	PANTONE
Concrete	G556	Snow Concrete	9002		12-0404 TPX
	G557	Cloud Concrete	7044		14-0002 TPX
	M551	Chic Concrete		S 4502-Y	17-1210 TPG
	M552	Shadow Concrete		S 5502-Y	17-1500 TPG
	M553	Ebony Concrete		S7500-N	18-0403 TPG
	G554	Urban Concrete		S 3502-Y	15-0000 TPG
	G555	Steel Concrete		S 4502-Y	17 0205 TPG

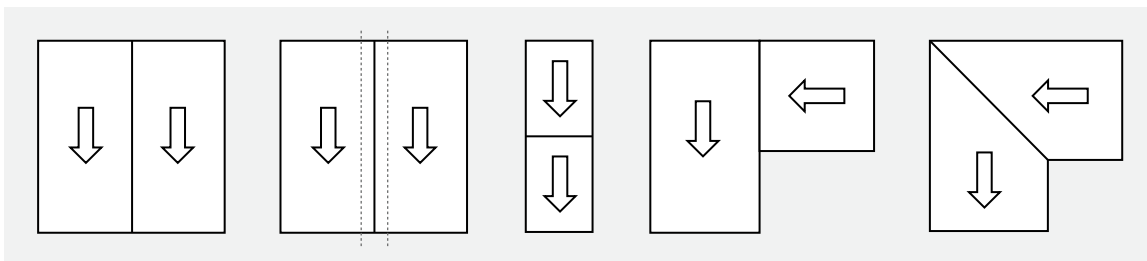
2.4 Product: Sheet – LRV:

GROUP	COLOUR CODE	COLOUR NAME	LRV
Concrete	G556	Snow Concrete	
	G557	Cloud Concrete	
	M551	Chic Concrete	25.35
	M552	Shadow Concrete	18.87
	M553	Ebony Concrete	11.22
	G554	Urban Concrete	31.96
	G555	Steel Concrete	23.26

3. Bonding Sheet to Sheet

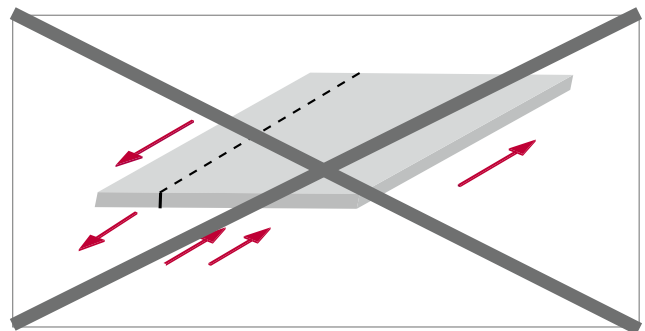
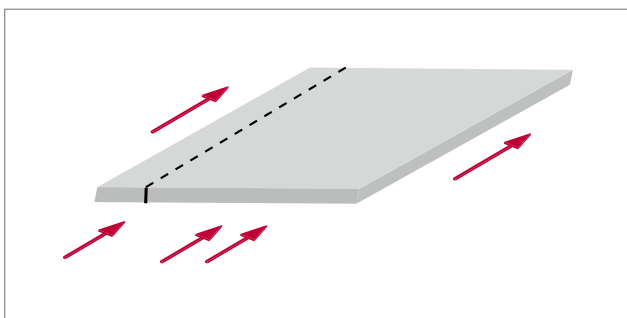
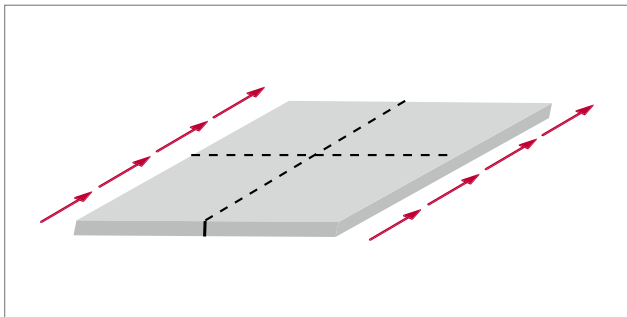
When bonding sheet to sheet double check the best veining possibility according to its veining flowing look. There's no way to determine which method will work best with any particular colour other than to visually evaluate the configurations.

Again, we strongly advise the fabricator to ensure the purchaser and end user understand these considerations before commencing work.



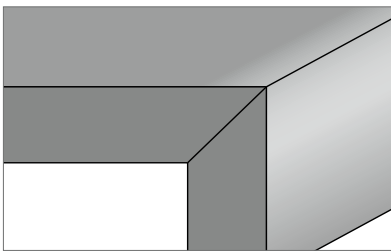
When using several sheets for doing one job ensure a continuous flow of sequential numbers as well as the same production flow.

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°).

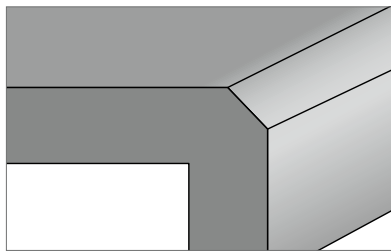


4. Edge bonding flow

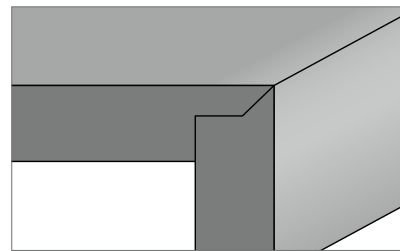
To let the pattern flow around the edges a 45° angled cut of the edge or an alternative rebate is one of the best solutions.



Standard v-grooved



Standard with bevel

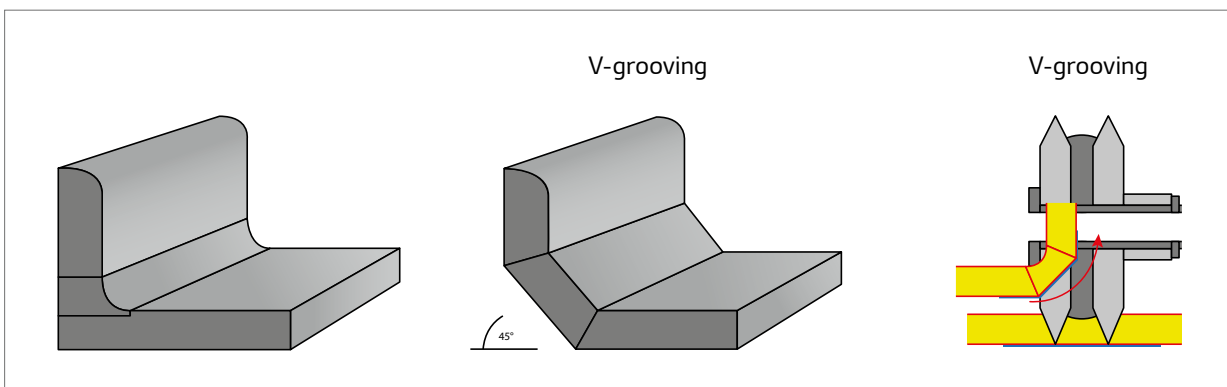


Standard V-grooved and angled

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 whilst best to prepare a sample and let this design sign off.

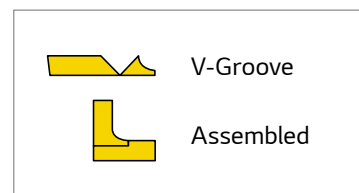
5. Backsplash

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).



6. Sanding (finishing)

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

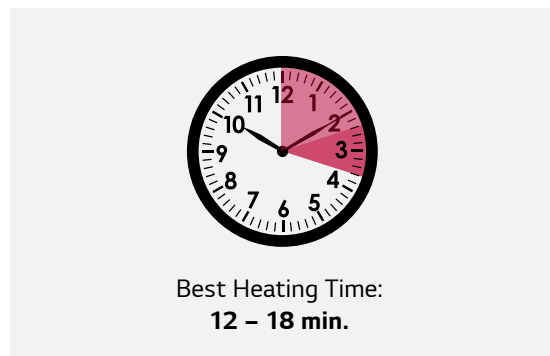
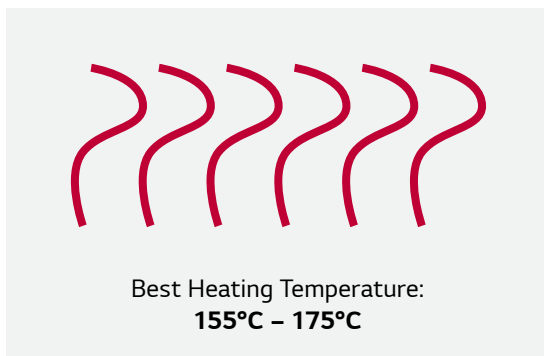


		Standard recommendation					
FINISH-LEVEL	MATT-FINISH		SEMI-GLOSS-FINISH		HIGH-GLOSS-FINISH		
HI-MACS® colour family	for all colours		for all colours		for all colours		
Sanding steps	micron-sandpaper	grid-sandpaper	micron-sandpaper	grid-sandpaper	micron-sandpaper	grid-sandpaper	
Step 1	100/80 µ	150/180 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™ 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		take dust away		
Step 6				industrial paper towel	Finesse-it™ Finish-component	1200	
	take dust away		take dust away		take dust away		
Step 7						1500	
						1800	
						2500	

7. 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.

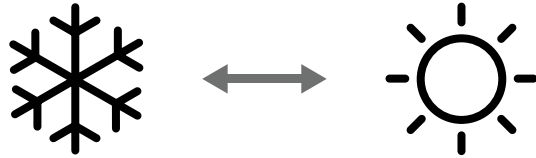


The heating time is similar to the general heating time of HI-MACS[®] products for the thermoforming process. The classification of a minimum radius for CONCRETE is approx. $\geq 85\text{mm}$. Be aware that any undertaking of recommended radii can cause some colour change or create some cracks. For any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

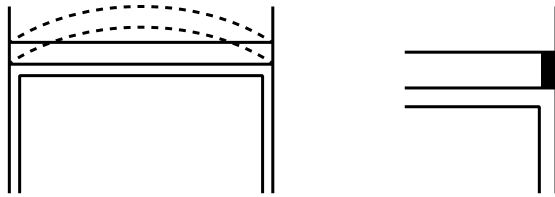


8. Thermal Expansion



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:

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

■ 9. 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.

■ 10. Summary

Important:

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

11. Fire Classification

11.1 Fire Classification Report according to DIN 4102-2 / M551 Chic Concrete: "B1"

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EXOVA

Testing, Advising, Assuring.

Test report No. 2018-1885
 for applying of a required "Verwendbarkeitsnachweis"
 issued 19.11.2018

Applicant: LG Hausys Europe
 Lyonerstr. 15
 D - 60528 Frankfurt am Main

Date of order: 22.10.2018
Date of sampling: no official sampling of the specimen by a representative of Exova Warringtonfire, Frankfurt
Date of arrival: 24.10.2018
Date of test: 07.11.2018 + 12.11.2018

Order
 Testing of the flammability (building class B1) according to DIN 4102-1 (May 1996)

Description / designation of the test object
Product name: HI-MACS Concrete M551 Chic Concrete
Description of the relevant test procedure
 DIN 4102 part 1 (Mai 1996)

This test report does not replace the required „Verwendbarkeitsnachweis“. It is only used for issuing the "Verwendbarkeitsnachweis".

DAKS
 DEUTSCHE ANSTALT FÜR QUALITÄTSSICHERUNG
 DAKS INSTITUT FÜR BAUWEISEN

Registered Office: Exova GmbH, Industriepark WEING, CHL, Frankfurt, D-60528, Registered Company No. HRB 18346
 USt-IdNr. DE235877113

Testing, Advising, Assuring.

Test report No. 2018-1885 issued 19.11.2018 page 8 of 8

Assessment
 The material described in chapter one fulfils the requirements of the building class B2 according to DIN 4102-1 (Mai 1996).
 The determined test results show that the material also fulfils the requirements
of the building class B1
 according to DIN 4102-1 (Mai 1996).

Special note
 The fire test result is only valid for the material described in chapter one in the tested colour, square weight and thickness.
 The test was carried out in free hanging configuration.
 The distance to other plane material must be more or equal then 40 mm.

The material wasn't tested after an outside storage.
 In combination with other materials (for example coatings, deposits) the burning behaviour could be influenced unfavourable so that the classification above is not valid any longer. According to DIN 4102-1 the burning behaviour in combination with other materials has to be tested separately.
 This test report does not replace the required „Verwendbarkeitsnachweis“. It is only used for issuing the "Verwendbarkeitsnachweis".

Frankfurt, the 19.11.2018

H. Anders
 Tester in Charge

F. Schenkling
 Prüfstellenleiter Bau-PVO

DAKS
 DEUTSCHE ANSTALT FÜR QUALITÄTSSICHERUNG
 DAKS INSTITUT FÜR BAUWEISEN

This Test report is valid until 08.11.2023.
 The results of the tests made only to the behaviour of the test specimen which is designated on the top.
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 This test report is a translation of the German version 2018-1884 (issued 19.11.2018). In case of doubt only the German version is valid.
 This test report contains 8 pages and 3 annex.

11.2 Fire Classification Report according to DIN 4102-2 / G554 Urban Concrete: "B1"

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EXOVA

Testing, Advising, Assuring.

Test report No. 2018-1884
 for applying of a required "Verwendbarkeitsnachweis"
 issued 19.11.2018

Applicant: LG Hausys Europe
 Lyonerstr. 15
 D - 60528 Frankfurt am Main

Date of order: 22.10.2018
Date of sampling: no official sampling of the specimen by a representative of Exova Warringtonfire, Frankfurt
Date of arrival: 24.10.2018
Date of test: 07.11.2018 + 12.11.2018

Order
 Testing of the flammability (building class B1) according to DIN 4102-1 (May 1996)

Description / designation of the test object
Product name: HI-MACS Concrete G554 Urban Concrete
Description of the relevant test procedure
 DIN 4102 part 1 (Mai 1996)

This test report does not replace the required „Verwendbarkeitsnachweis“. It is only used for issuing the "Verwendbarkeitsnachweis".

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 USt-IdNr. DE235877113

Testing, Advising, Assuring.

Test report No. 2018-1884 issued 19.11.2018 page 8 of 8

Assessment
 The material described in chapter one fulfils the requirements of the building class B2 according to DIN 4102-1 (Mai 1996).
 The determined test results show that the material also fulfils the requirements
of the building class B1
 according to DIN 4102-1 (Mai 1996).

Special note
 The fire test result is only valid for the material described in chapter one in the tested colour, square weight and thickness.
 The test was carried out in free hanging configuration.
 The distance to other plane material must be more or equal then 40 mm.

The material wasn't tested after an outside storage.
 In combination with other materials (for example coatings, deposits) the burning behaviour could be influenced unfavourable so that the classification above is not valid any longer. According to DIN 4102-1 the burning behaviour in combination with other materials has to be tested separately.
 This test report does not replace the required „Verwendbarkeitsnachweis“. It is only used for issuing the "Verwendbarkeitsnachweis".

Frankfurt, the 19.11.2018

H. Anders
 Tester in Charge

F. Schenkling
 Prüfstellenleiter Bau-PVO

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