

Interior Solid Surface Material

# HI·MACS

## ■ TECHNICAL DATA SHEET MARMO COLLECTION





Photo: studio podrini














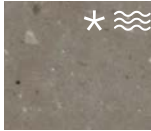
Colours belonging to the Marmo collection exhibit a greater variation in colour, shading, and pattern than is apparent in small size samples. Even A4-size samples and full-sheet photographic images can't fully capture these variations. If possible, allow the customer to view the actual material together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

When fabricating Marmo colours it's important to use consecutive sheets whenever there will be a field seam or a seam creating a "U"- or "L"-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 consistent or uniform alignment. In other cases it may be necessary to sacrifice some material in order to join areas that are similar. Either approach can not only deliver a more pleasing appearance but will minimise the visibility of seams and joints.

## 1 Product Specifications

### NEW AURORA COLOURS

					
Aurora Linen Cream M623 [12 mm]	Aurora Cocoa M624 [12 mm]	Aurora Terra M625 [12 mm]	Aurora Butter Cream M627 [12 mm]	Aurora Ecrú M701 [12 mm]	Aurora Frost M702 [12 mm]
					
Aurora Midnight M703 [12 mm]	Aurora Canyon M705 [12 mm]	Aurora Angora M706 [12 mm]	Aurora Magnolia M707 [12 mm]	Aurora Sable M708 [12 mm]	Aurora Calacatta Luna M801 [12 mm]

				
Aurora Torano M601 [12 mm]	Aurora Bisque M612 [12 mm]	Aurora Umber M614 [12 mm]	Aurora Blanc M617 [12 mm]	Aurora Cotton M615 [12 mm]
				
Pavia M603 [12 mm]	Aurora Bianco M606 [12 mm]	Aurora Grey M608 [12 mm]	Sanremo M605 [12 mm]	
				
Ispani M428 [12 mm]	Edessa M501 [12 mm]	Bellizzi M427 [12 mm]	Terni M201 [12 mm]	Naples M904 [12 mm]

\* The basic HIMACS material is identical for every colour but it is important to note that darker and more heavily pigmented colours will show dust, scratches, haziness, marks left by hard water and other ordinary wear and tear more noticeably than lighter textured colours. Therefore colours marked with a \* are less suitable for applications that are exposed to extensive surface contact such as worktops located in heavy traffic area.

There may be deviations between the illustrated and actual colours owing to printing techniques. To receive the detailed colour range, please contact us at [himacs.eu](mailto:himacs.eu).

≈ Marmo is a randomly veined product, specific fabrication guidelines need to be followed. Ask your sales partner for more information or visit [himacs.eu](mailto:himacs.eu).

💡 Colours with this mark have a semi-translucent effect, evident when combined with light sources.



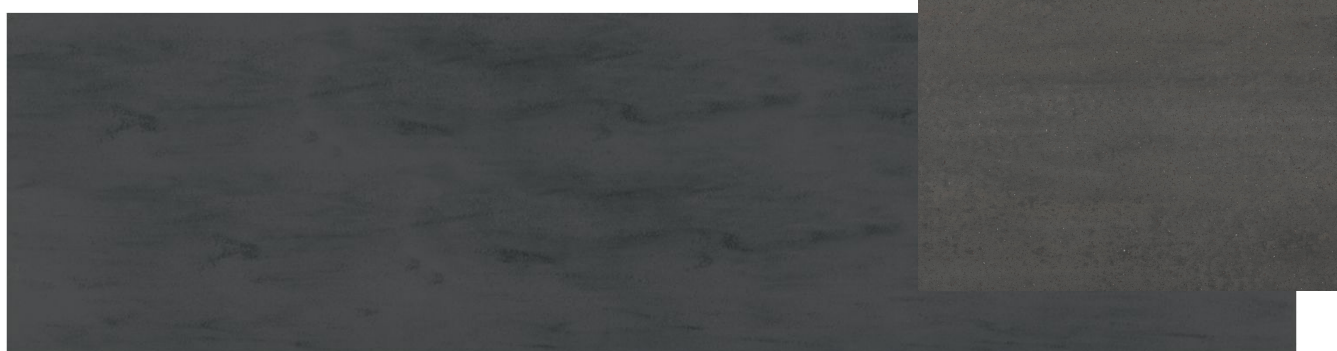
**M623 Aurora Linen Cream**



**M624 Aurora Cocoa**



**M625 Aurora Terra**



**M627 Aurora Butter Cream**

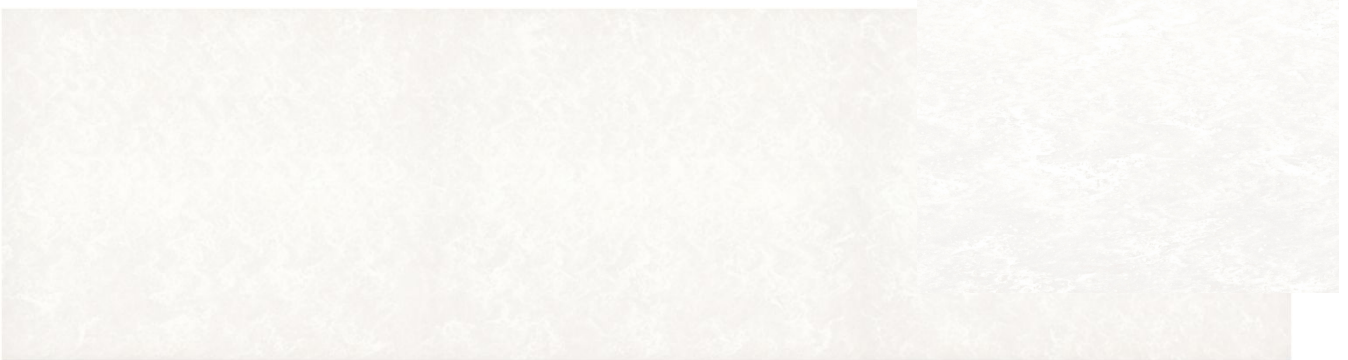




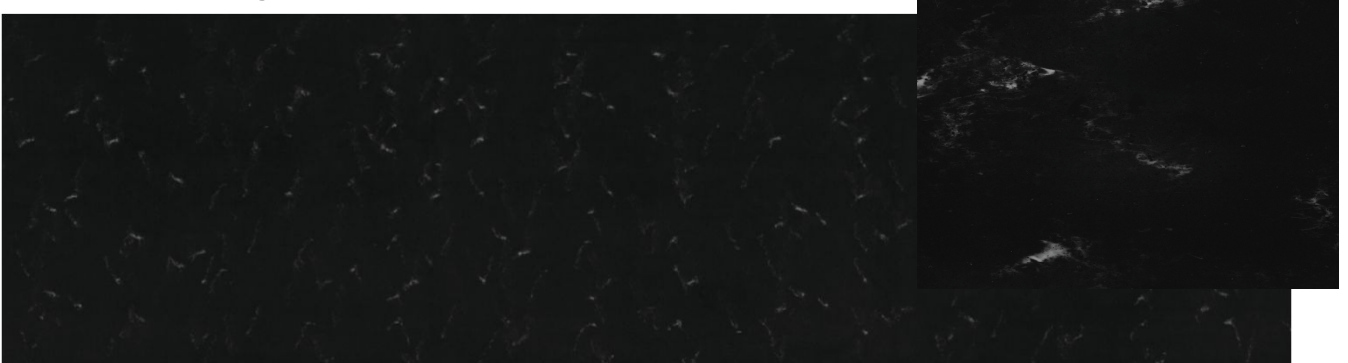
**M701 Aurora Ecrú**



**M702 Aurora Frost**



**M703 Aurora Midnight**



**M705 Aurora Canyon**



**M706 Aurora Angora**



**M707 Aurora Magnolia**



**M708 Aurora Sable**



**M801 Aurora Calacatta Luna**



## M603 Pavia



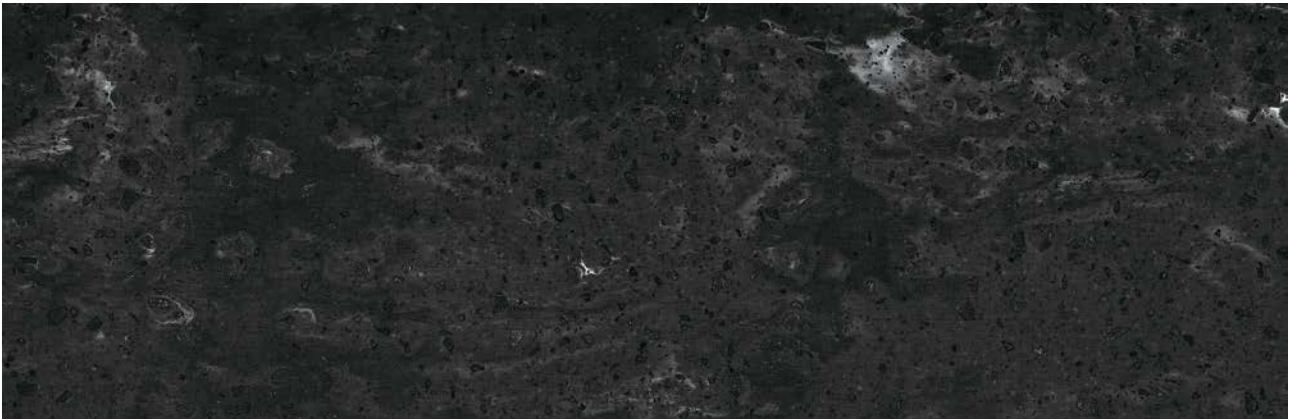
M603 Pavia does show a special translucent effect when place light behind.

Be aware of additional fabrication care and follow the instructions of HIMACS Lucent colour family in our TDS Lucent.





## M605 San Remo\*



\*does include some copper glitter particles in specific chips. But those are very small and distributed through the whole material thickness

## M606 Aurora Bianco



## M608 Aurora Grey\*\*



\*\*does include some glitter particles. But those are very small and distributed through the whole material thickness

**M601 Aurora Torano**



**M612 Aurora Bisque**



**M614 Aurora Umber**



**M615 Aurora Cotton**



**M617 Aurora Blanc**





**M501 Edessa**



**M428 Ispani**



**M427 Bellizzi**



**M201 Terni**



**M904 Naples**



## 2 Sheet Specifications

GROUP	SHEET COLOUR CODE	COLOUR NAME	SHEET THICKNESS	SHEET SIZE (WIDTH X LENGTH)	M² PER SHEET	WEIGHT PER SHEET	WEIGHT PER M²	SHEETS PER PALLET
Marmo	M603	Pavia	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M605	Sanremo	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M606	Aurora Bianco	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M608	Aurora Grey	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M617	Aurora Blanc	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M615	Aurora Cotton	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M614	Aurora Umber	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M601	Aurora Torano	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M612	Aurora Bisque	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M201	Terni	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M426	Laviano	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M427	Bellizzi	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M428	Ispani	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M501	Edessa	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M904	Naples	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M623	Aurora Linen Cream	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M624	Aurora Cocoa	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M625	Aurora Terra	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M627	Aurora Butter Cream	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M701	Aurora Ecru	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M702	Aurora Frost	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M703	Aurora Midnight	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M705	Aurora Canyon	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M706	Auroa Angora	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M707	Aurora Magnolia	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M708	Aurora Sable	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15
	M801	Aurora Calacatta Luna	12 mm	760 mm x 3680 mm	2.7968	55,38 kg	19,80 kg	15



## ■ 3 Sheet & Matching Adhesives

SHEET			ADHESIVE		
GROUP	COLOUR CODE	COLOUR NAME	COLOUR CODE	COLOUR NAME	PACKAGING UNIT
Marmo	M603	Pavia	H21	Pavia White	45 ml / 250 ml
	M605	Sanremo	H35	Dark	45 ml / 250 ml
	M606	Aurora Bianco	H02	Arctic White	45 ml / 250 ml
	M608	Aurora Grey	H139	Aurora Grey	45 ml / 250 ml
	M617	Aurora Blanc	H146	Aurora Blanc	45 ml / 250 ml
	M615	Aurora Cotton	H144	Aurora Cotton	45 ml / 250 ml
	M614	Aurora Umber	H143	Aurora Umber	45 ml / 250 ml
	M601	Aurora Torano	H02	Arctic White	45 ml / 250 ml
	M612	Aurora Bisque	H141	Aurora Bisque	45 ml / 250 ml
	M201	Terni	H68	Terni	45 ml / 250 ml
	M426	Laviano	H03	Grey	45 ml / 250 ml
	M427	Bellizzi	H36	Silver	45 ml / 250 ml
	M428	Ispani	H36	Silver	45 ml / 250 ml
	M501	Edessa	H02	Arctic White	45 ml / 250 ml
	M904	Naples	H107	Marta Grey	45 ml / 250 ml
	M623	Aurora Linen Cream	H140	Aurora Ash	45 ml / 250 ml
	M624	Aurora Cocoa	H126	Beige	45 ml / 250 ml
	M625	Aurora Terra	H39	Latte	45 ml / 250 ml
	M627	Aurora Butter Cream	H52	Babylon Beige	45 ml / 250 ml
	M701	Aurora Ecu	H139	Aurora Gray	45 ml / 250 ml
	M702	Aurora Frost	H144	Aurora Cotton	45 ml / 250 ml
	M703	Aurora Midnight	H07	Black	45 ml / 250 ml
	M705	Aurora Canyon	H44	Mikeno	45 ml / 250 ml
	M706	Aurora Angora	H44	Mikeno	45 ml / 250 ml
	M707	Aurora Magnolia	H01	Satin White	45 ml / 250 ml
	M708	Aurora Sable	H20	Cream	45 ml / 250 ml
	M801	Aurora Calacatta Luna	H02	Arctic White	45 ml / 250 ml

## ■ 4 LRV Light Reflective Values and Colour Codes (Pantone - RAL - NCS)

GROUP	Sheet Color Code	Sheet Name	LRV	Pantone	RAL Classic	NCS
Marmo	M623	Aurora Linen Cream	62,39	12-0304 TPG ○ 13-0905 TPG ○ 11-0608 TPG ○ 14-1208 TPG ○	RAL 9001 ○ RAL 1013 △ RAL 1011 △	S 1005-Y20R ○ S 2005-Y40R △ S 3020-Y30R △ S 0500-N △
	M624	Aurora Cocoa	40,71	15-1309 TPG ○ 16-1320 TPG ○ 16-1310 TPG ○ 11-4001 TPG ○	RAL 8025 ▲ RAL 8025 △ RAL 9003 ○	S 3010-Y30R ○ S 4010-Y30R ○ S 5010-Y30R ○ S 0500-N ○
	M625	Aurora Terra	8,74	19-0812 TPG ○ 19-0810 TPG ○ 19-0508 TPG ○	RAL 8019 ○ RAL 9004 ○ RAL 8028 △	S 8000-N ○ S 8000-Y50R ○ S 8500-N ○
	M627	Aurora Butter Cream	38,06	15-1308 TPG ○ 13-5304 TPG ○ 17-1210 TPG ○ 11-1001 TPG ○	RAL 1019 △ RAL 9001 ○ RAL 8025 ▲	S 3005-Y20R △ S 2005-Y20R ○ S 5010-Y30R △ S 1002-Y ○
	M701	Aurora Ecru	68,16	12-4302 TPG ○ 17-1210 TPG ○ 15-0000 TPG △	RAL 9002 △ RAL 7044 △ RAL 7006 △	S 1000-N △ S 2502-Y ○ S 2502-Y ○
	M702	Aurora Frost	75,21	12-4302 TPG ○ 11-4001 TPG ○ 15-0000 TPG △	RAL 9002 ▲ RAL 9003 ○ RAL 7044 ▲	S 1000-N △ S 1502-Y ○
	M703	Aurora Midnight	6,78	19-4004 TPG ○	RAL 9001 ○	S 9000-N ○
	M705	Aurora Canyon	58,47	12-5202 TPG ○ 15-1218 TPG ○ 16-1212 TPG △ 11-4001 TPG ○	RAL 9001 ○ RAL 1015 △ RAL 1011 △ RAL 9003 ○	S 1005-Y20R ○ S 2005-Y20R △ S 3020-Y20R ○ S 0500-N ○
	M706	Aurora Angora	57,08	12-5202 TPG ○ 15-1218 TPG ○ 16-1212 TPG △ 11-4001 TPG ○	RAL 9001 ○ RAL 1015 △ RAL 1011 △ RAL 9003 ○	S 1005-Y20R ○ S 2005-Y20R △ S 3020-Y20R ○ S 0500-N ○
	M707	Aurora Magnolia	65,92	12-4302 TPG ○ 14-1208 TPG ○ 13-0907 TPG △ 14-0002 TPG ○	RAL 9003 ▲ RAL 1019 △ RAL 1011 △ RAL 7047 △	S 1002-Y △ S 3010-Y30R ○ S 2502- △
	M708	Aurora Sable	56,43	13-0905 TPG ○ 17-1105 TPG ○ 13-0607 TPG △	RAL 1013 △ RAL 1019 △ RAL 7006 △	S 1005-Y20R △ S 1002-Y △ S 2005- ○ S 5005- Y20R ○
	M801	Calacatta Luna	81,89	11-0601 TPG ○ 12-4302 TPG △	RAL 9003 ○ RAL 9002 ○ RAL 7044 △	S 0502-G ○ S 1002-Y ○ S 1502-Y △

GROUP	SHEET COLOUR CODE	COLOUR NAME	LRV	PANTONE	RAL	NCS
Marmo	M603	Pavia	77.22	11-0601 TPX 11-4800 TPX	RAL 9003 ○	
	M605	Sanremo	8.49	19-4006 TPX 19-0000 TPX	RAL 8019 RAL 9005 RAL 9010 RAL 8017 ○	
	M606	Aurora Bianco	78.35	11-0601 TPX 13-4403 TPX	RAL 9003 RAL 7045 RAL 9002 ○	
	M608	Aurora Grey	58.52	13-4403 TPX 12-0404 TPX	RAL 7047 △	
	M617	Aurora Blanc	77.12	11-4800TPG ○ 11-0601TPG 16-4703TPG	RAL 9003 ○ RAL 7047 RAL 7042	S 0500-N ○ S 0300-N △ S 4000-N ○
	M615	Aurora Cotton	73.51	11-4202 TPG ○ 11-4001TPG △ 11-4301TPG	RAL 9003 △	S 0500-N ○ S 0300-N △ S 1002-Y
	M614	Aurora Umber	13.03	19-0808TPG ○ 13-0000TPG 19-3901TPG	RAL 7039 △ RAL 7044 ○ RAL 8019 △	S 7005-Y50B ○ S 1502-Y50R ○ S 7005-R50B
	M601	Aurora Torano	71.82	11-4800TPG ○ 16-0000TPG	RAL 9003 ○ RAL 7047 RAL 7036	S 0500-N ○ S 3502-R
	M612	Aurora Bisque	53.48	12-5202TPG ○ 12-4301TPG 16-1210TPG	RAL 085 85 10 △ RAL 080 80 10 ○ RAL 070 70 10	S 1005-Y30R ○ S 1505-Y30R ○ S 3010-Y60R
	M201	Terni	33.18	16-1212 TPG	~ RAL 1001 ▲ ~ RAL 1011	S 3010-Y30R S 0500-N
	M206	Monza	9.14	19-1101 TPG	RAL 8019 RAL 9005 RAL 9010 RAL 8017 ○	S 8000-N S 8500-N S 1000-N S 9010-Y50R
	M303	Capri	67.54	19-0812 TPG 19-5708 TPG 17-1052 TPG 17-4405 TPG	RAL 8019 RAL 8024 ○ RAL 7011 RAL9005	S 8005-Y50R S 8500-N S 6030-Y30R S 5005-R80B
	M306	Breeze White	78.57	11-4800 TPG	RAL 9003 ○	S 0500-N S 3000-N
	M422	Cremona	54.73	12-5202 TPG	RAL 9001 RAL 7030 RAL 1014 △	S 1005-Y10R S 0500-N S 2005-Y20R S 2002-Y
	M426	Laviano	45.14	14-4107 TPG	RAL 7047 RAL 7004 ○ RAL 7030	S 2500-N S 0300-N S 6000-N S 2002-Y20R
	M427	Bellizzi	8.37	11-1001 TPG	RAL 9001 RAL 9016 △	S 1002-Y50R S 0500-N S 1505-Y20R
	M428	Ispani	89.56	11-0601 TPG	RAL 9003	S0500-N
	M501	Edessa	75.75	11-4800 TPG 16-3802 TPG	RAL 9003 △ RAL 7047	S 0500-N S 1000-N S 3000-N
	M904	Naples	20.22	17-1500 TPG		S 5502-Y

○ Most similar  
△ Somewhat similar  
▲ Least similar

LRV and Colour Code, such as NCS, Pantone or RAL are only meaningful values for solid colours. The values provided by other colours are for reference only.



## ■ 5 Light Transmittance Value

According to test method ASTM D1003

\* Measuring Device: NDH-5000 Hazemeter



	M603 PAVIA 12 MM	S028 ALPINE WHITE 12 MM	S028 ALPINE WHITE 6 MM	S006 ARCTIC WHITE 12 MM	S006 ARCTIC WHITE 6 MM	S302 OPAL LUCENT 12MM	S009 SOLID CREAM 12MM	S005 SOLID GREY 12MM
Transmittance Value (in %)	5.68	0.03	1	3.23	9.02	9.64	4.89	0.42
Haze	88.57	100	87.35	89.55	87.9	89.97	89.16	90.43

### Haze:

Transmitted light can be divided into straight transmitted light and diffused transmitted light. Diffused transmitted light causes an opaque cloudy appearance, so high Haze reduces transparency.

$$\text{Haze} = \frac{\text{Diffraction transmittance}}{\text{Total transmittance}}$$

## ■ 6 Fabrication

### 6.1 Special Sheet Characteristics

Customer expectations are best managed by fully educating the customer about product characteristics. For instance, the “motion” or “veining” that appears on the surface doesn’t continue directly through the sheet thickness. The top of a Marmo 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 colour and pattern distribution on the top surface changes to random layers of colours and stripes distributed through the material’s thickness.

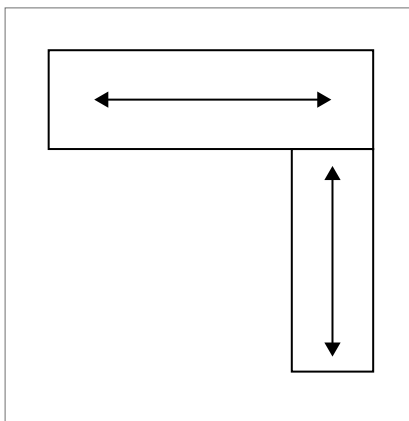


Conventional “stacked” or “built-up” edges generally can not be used due to the dramatic colour and pattern differences as seen in this image.

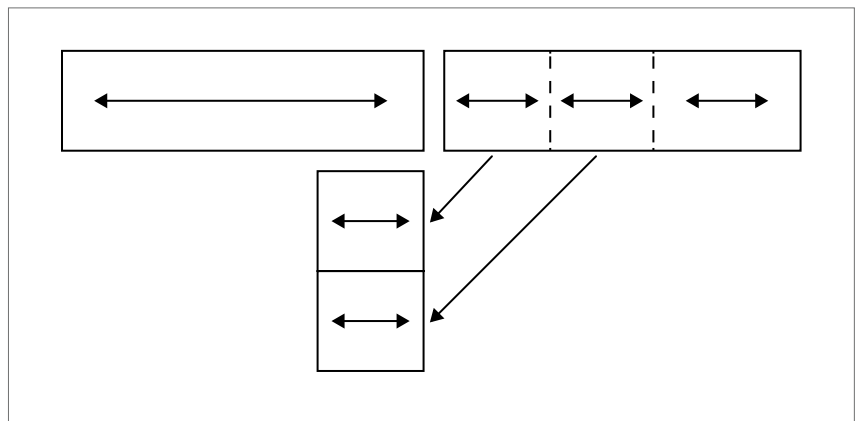
**Note:** Marmo is the same material as any other HIMACS product, but it requires special consideration in order to fabricate an aesthetically pleasing finished product. We strongly advise the fabricator to confirm that the purchaser and the end user understand these considerations before proceeding.

## 6.2. Sheet to Sheet bonding flow

Fabricating an “L-shape” or “U-shape” countertop presents other challenges. Depending on the character of the HIMACS 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 colour other than to visually evaluate the configurations.

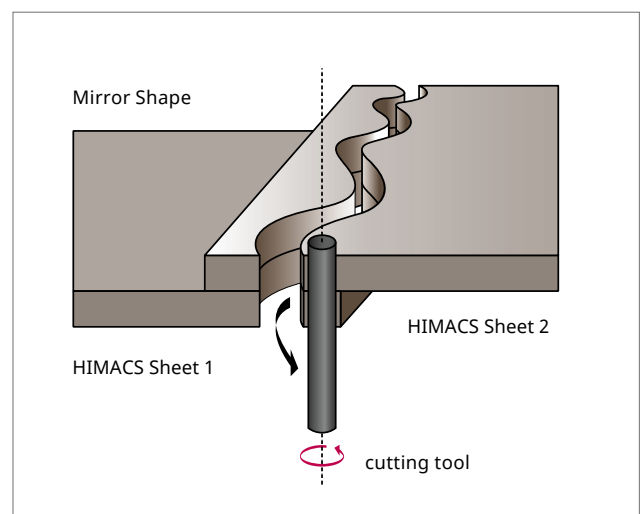
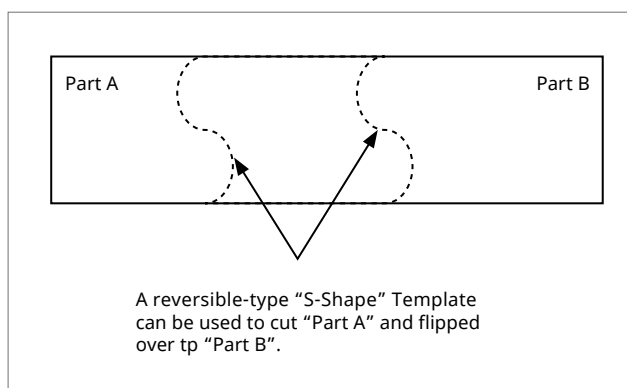


Example 1

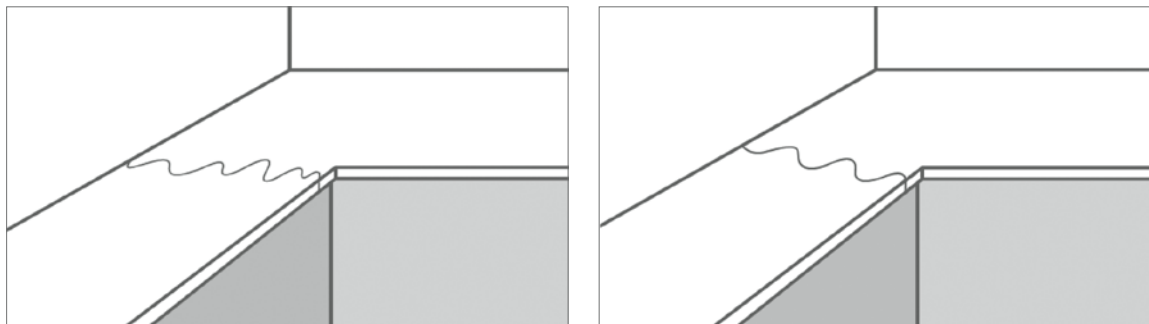


Example 2

Fabricating field seams using an “S” seam can help make those seams less visible. “Inconspicuous” seams are extremely difficult to create, but creating the seam in an “S” shape will help to reduce the visual impact when two pieces of material with random patterns and colour distribution are joined.



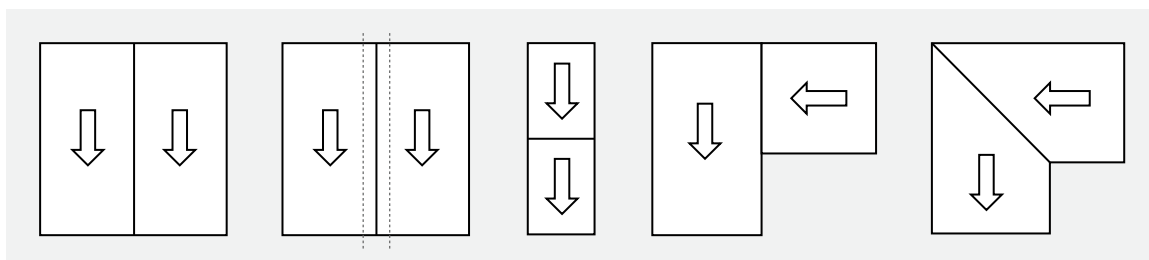
To achieve the best result of the visible pattern direction, particularly with the Marmo colours: an irregular seam flow may be more effective and shows less pattern chip/structure cut between one to the other sheet.



An even more irregularly directed cut has to be prepared absolutely straight and also parallel. Then re-sand with sandpaper of approx. 180grit (or 60 micron). Always clean the cut edges with a white cloth and use denatured alcohol or acetone. Ensure the edge is absolutely straight when making a “butt”-seam. Better still, 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.

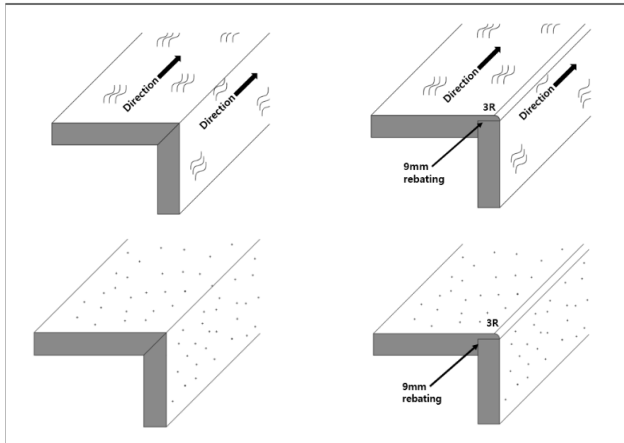
The adhesive is not developed as a filler for repairs. In the case of damage to the surface it is strongly recommended to make a plug repair if possible (tools are available on the market – please contact your local technical support).

When bonding sheet to sheet double check the best veining possibility according 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 confirm that the purchaser and the end user under-stand these considerations before proceeding.

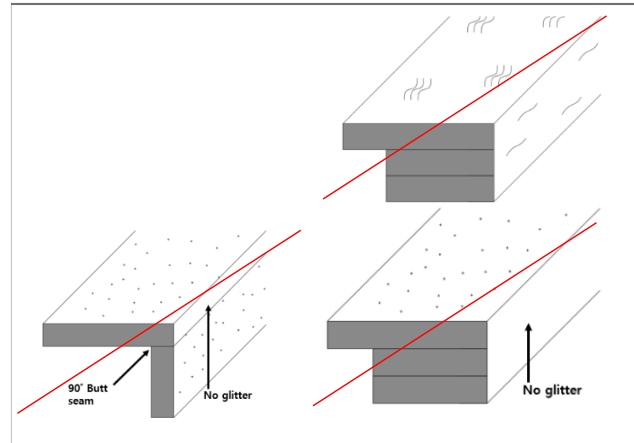




## Recommended Edge design

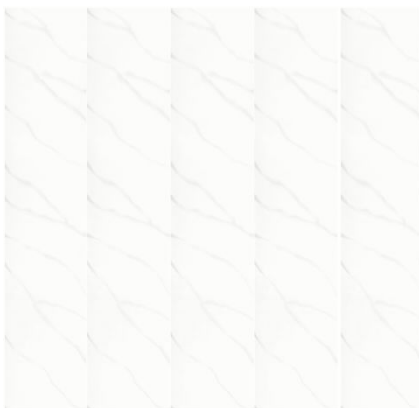


## Not Recommended Edge design

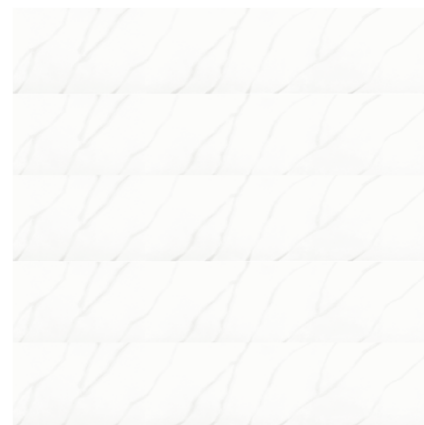


### Note:

Due to the design of veins in M801 Aurora Calacatta Luna, a continuous creation of veining will be not possible to arrange and the view will be as samples below:



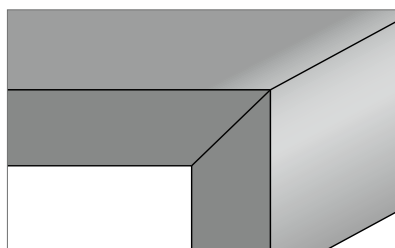
Vertical view of full sheets of M801



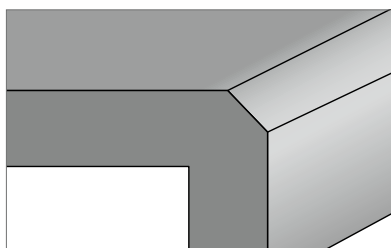
horizontal view of full sheets of M801

## 6.3 Edge bonding flow

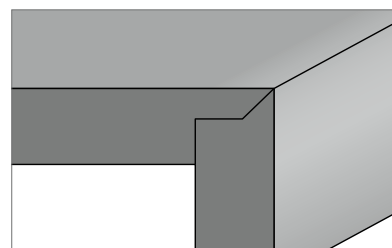
To let the pattern flow around the edges a 45° angled cut of the edge or an alternative rebate is one of the best solutions.



Standard V-grooved



Standard with bevel

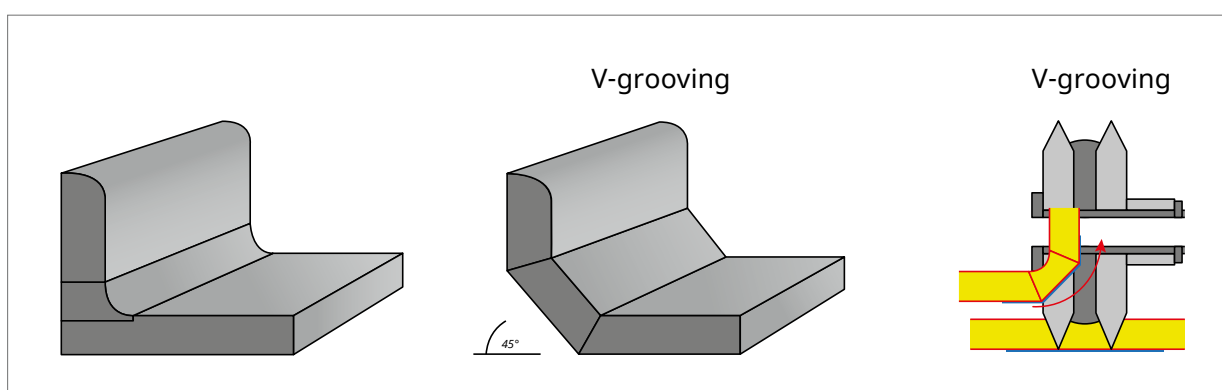


Standard V -grooved and angled

For the bonding process of the edges please follow the instructions of edge treatments. We would recommend the fabricator prepare a sample for the client and make sure that they understand all the considerations before commencing work.

## 6.4 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.



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).



- 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	
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®" SuperpadS/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®" SuperpadS/G Scotch Brite™ Maroon 7447	"useit®" SuperpadS/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®" SuperpadS/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 the Thermoforming process we recommend using a pre-heating oven with double sided heating plates.



Best Heating Temperature:  
**155°C – 175°C**



Best Heating Time:  
**12 – 18 min.**

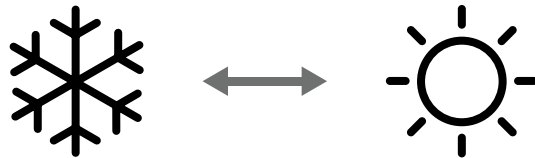
The heating time is similar to the general heating time of HIMACS products for the thermoforming process. The classification of a minimum radius for MARMO is approx.  $\geq 100$  mm. Be aware that any undertaking of recommended radii can cause some colour change or create some cracks. For any technical enquiry contact your local technical support.

For more detailed thermoforming equipment or any thermoforming accessories please contact [global@nabuurs.com](mailto:global@nabuurs.com) or visit the website: [www.globalvacuumpresses.com](http://www.globalvacuumpresses.com)

**$R_i \geq 100$  mm** →

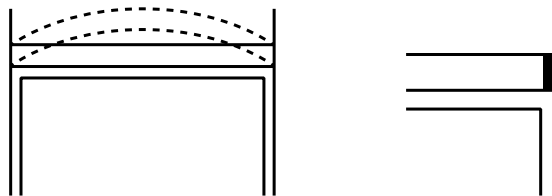


## ■ 9 Thermal Expansion



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

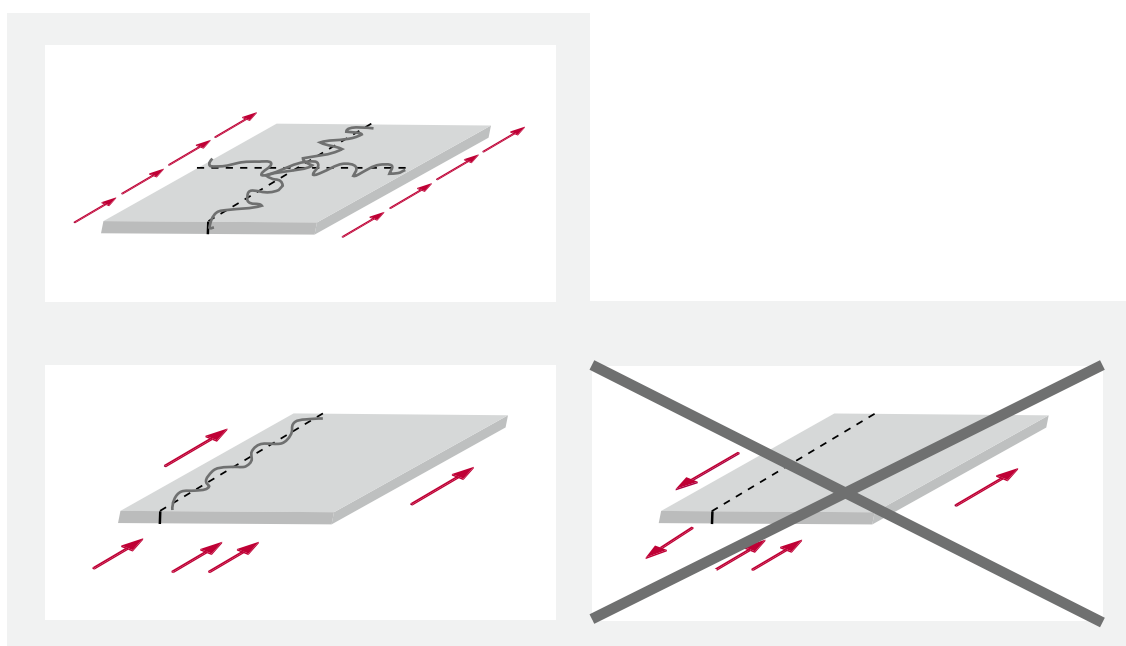
- ☐ Check any fabricated item on quality aspects before leaving the workshop.
- ☐ Any mistakes can be repaired in the workshop at the time of fabrication.  
Repairs needed at a later date will be more costly and time consuming.

**Important:**

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

## 11 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°).



Marmo is the same 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 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 are available on the market – please contact your local technical support).

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

It is Fabricators responsibility to find the best assembling arrangement of the veining layout.

Be aware that the veining may 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 colors to avoid unexpected whitening.

## 12 Material Fire Performance

### Marmo Sheet Pavia M603

Fire performance test according to EN 13501 carried out by EN 13823 & ISO 11925-2



Classification report No. 210643-K1 issued 27.08.2021

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### 3 Classification and range of application

#### 3.1 Reference

The classification was carried out according to the chapter 11 of DIN EN 13501-1

#### 3.2 Classification

The tested material is incorporated regarding its behaviour in case of fire into the class **B**.  
Concerning the smoke development the tested material is incorporated into the class **s1**.  
Concerning the dripping off behaviour the tested material is incorporated into the class **d0**.

The classification of the tested material reads thus:

## B – s1, d0

#### 3.3 Area of application

The classification is only valid for the material described in chapter one, in the tested colour, thickness and surface weight in free standing / free hanging configuration.  
The distance to other plane material must be more or equal to 80 mm.

### 4 Reservation

This classification report replaces not a possible required type admittance or type certification of the product.

Frankfurt 27<sup>th</sup> August 2020

R. Berger / H. Anders  
Tester in charge

P. Scheinkönig  
Technical Lab Leader construction product regulations



Dieser Entwurf bringt keine Rechtswirkung mit sich und kann nicht als Beweis Dritten gegenüber angewandt werden.

For the complete test to download, please visit our website: [www.himacs.eu](http://www.himacs.eu) or send your request to your local HIMACS supplier.

## Marmo Sheet Verona (Colour out of order)

Fire performance test according to DIN 4102-1

**Test-nr.: 302710-001**

**Material tested:** MARMO Verona

**Substrate:** none, freely suspended

Results from tests in the fire shaft "Brandschacht-Prüfung":

Specifications acc. DIN 4102-1		Value	Req.
Maximum of average Flue gas temperature	°C min:s	<b>235</b> 9:58	≤ 200
Maximal flame height	cm	100	-
Time	min	9	-
Residual length	sample 1	38	> 0
	sample 2	35	
	sample 3	34	
	sample 4	37	
	average	36	≥ 15
Smoke density	%*min	6,0	-

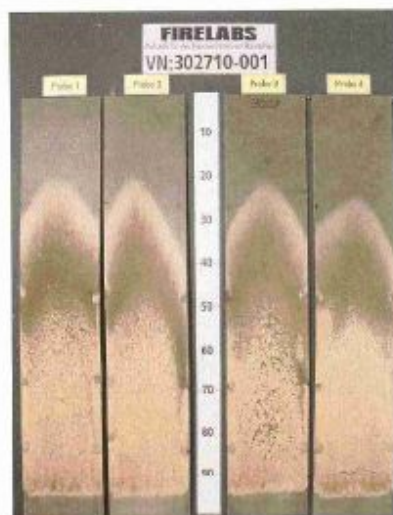
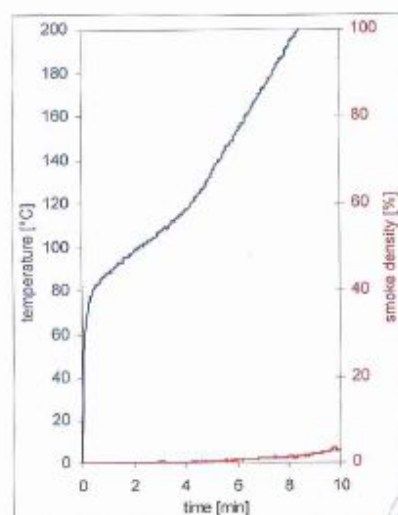


Photo of the test specimen after the test



Graphs of the flue gas temperature and the smoke density



For the complete test to download, please visit our website: [www.himacs.eu](http://www.himacs.eu) or send your request to your local HIMACS supplier.

## ■ LX Hausys Europe GmbH

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