Engineering progress
Enhancing lives

RAUVISIO noir

Technical information

REHAU

Contents

This “RAUVISIO noir” technical information is valid from October 2020.

You will find our current technical documentation available for download at **www.rehau.com/TI**.

All dimensions and weights are approximate. Subject to errors and modifications.

01 Information and safety instructions

Validity
This technical information is valid for Germany.

Current relevance of the technical information
To ensure your safety and the proper use of our products, please regularly check whether a more recent version of this technical information is available. You can obtain the current version of the document from your local dealer, your REHAU sales office or you can download it from **www.rehau.com/rauvisio-noir**.

Navigation
At the beginning of this technical information, you will find a detailed table of contents with the hierarchical headings and corresponding page numbers.

Pictograms and logos

 Safety notice

 Legal notice

 Important information which must be observed

 Your benefits

 Information available online

Intended use
RAUVISIO products may only be configured, installed and operated as described in this technical information. Any other use is deemed to be outside the intended scope of application.

Suitability of the material
The relevant, valid technical information is to be observed for the processing/assembly and use of RAUVISIO products. Our technical information is based on empirical values and knowledge acquired up to the time of printing. The dissemination of this information does not comprise any assurance of the properties of the products described. No explicit or implicit guarantee may be derived from it. The information does not release the user/purchaser from their obligation to assess the suitability of this material and the correct processing thereof to attain the required results in terms of objective and application.

Disclosure of information
It is essential to ensure that your customers, also including end customers, are aware of the necessity to observe the current technical information as well as instructions for the care and use for RAUVISIO products. The care and usage instructions must be made available to the end customer either by you or by your customers.

Note to our distribution partners and customers that resell RAUVISIO products:
Please also inform your customers of the need to follow the current technical information and make this available to them.

Note to the processor:
Please ensure that at least the installation guidelines (chapter “7 Installation guidelines”) and the care and usage instructions (chapter “8 Care and usage instructions for the end user”) are handed over to your customers and to fabrication and installation companies.

Safety instructions and assembly manuals
Observe the instructions on the packaging, accessories and installation instructions. Keep the installation instructions so that they are always available. If you do not understand the safety instructions or installation recommendations, or if there is any uncertainty with regard to their content, please contact your local REHAU sales office.

Relevant regulations and safety equipment
All applicable safety and environmental regulations as well as the regulations of the trade supervisory centre and professional association must be strictly observed. These always take priority over the instructions and recommendations given in the technical information.

Always use safety equipment such as
- Gloves
- Protective goggles
- Ear protection
- Dust mask

Adhesives and additional tools
Observe the safety regulations for the adhesives used and ensure that they are strictly observed.

Always store additional work materials such as alcohol-based cleaning products and other easily flammable materials in safe and well-ventilated places.

Ventilation/extraction, production dust
Ensure good ventilation and extraction around the processing machines.
If production dust is inhaled, provide fresh air and in the event of symptoms seek medical advice.

Health and safety at work and disposal
RAUVISIO noir is a composite made of wooden substrate and thermoset surface coating, which has ecologically sound properties. The dust created during processing is not toxic. The dust concentration is to be minimised through suitable protective measures such as extraction and use of a dust mask.
Dust from RAUVISIO noir does not pose any specific risk of explosion.

Disposal code in accordance with the Waste Catalogue Regulation:
- 170203/Construction and demolition waste consisting of wood, glass, plastic
- 120105/Waste from mechanical shaping processes and from the physical and mechanical surface treatment of metals and plastics (plastic shavings and lathe shavings)

Fire behaviour
Due to its composition of wooden substrate and thermoset laminate, RAUVISIO noir demonstrates favourable fire behaviour and is classified to DIN 4102-B2 as normal flammability. In the event of a fire, no toxic substances such as heavy metals or halogens are released. The same fire-fighting techniques can be used as for other building materials containing wood.

Fire-fighting
Suitable extinguishing agents for fire-fighting are
- Water spray
- Foam
- CO_2
- Extinguishing powder

A solid-stream water jet is unsuitable for safety reasons.

When extinguishing fires, wear appropriate protective clothing and, if necessary, a self-contained breathing apparatus.

02 Product description

02.01 Product description

RAUVISIO noir as a supermatt finish highlights the current trends in furniture and living room design. Pressing RAUVISIO noir into a substrate board forms a furniture board which is well integrated in the current process landscape. The subsequent seamless connection of the board and the edgeband produces a component with a homogeneous surface.
This creates an industrially manufactured product – RAUVISIO noir – that sets a new benchmark in the matt RAUVISIO family.

RAUVISIO noir has the following advantages:

- Supermatt
- Hygienic
- Non-porous
- Can be processed using conventional woodworking tools
- Suitable for applications with high exposure to moisture

Fig. 02-1 RAUVISIO noir in use

02.02 Individual components

Surface
RAUVISIO noir is a thermoset surface made of several layers, in short HPL (High Pressure Laminate), that is manufactured as laminate under pressure and temperature. The electron beam-hardened coating ensures high scratch

Wooden substrate
The wooden substrate as support ensures the process capability and forms the link between the thermoset balancing sheet and cover material made of HPL. resistance in matt.

Edgeband

	RAUKANTEX pure Traditional primer edgeband	**RAUKANTEX plus** Entry-level invisible joint	**RAUKANTEX pro** [1)] Permanent zero-joint
Description	Available in all dimensions and décors	The zero joint entry-level: A pre-coating of coloured adhesive on the reverse of the edgeband ensures an invisible zero joint on the component	Perfect zero joint through 100% polymer functional layer
Properties	Traditional edging	Invisible zero joint ▪ Colouring of the adhesive layer in defined standard colours	Permanently invisible and functional zero joint ▪ Precise colour matching of the polymer functional layer to the decorative designs ▪ No rubbing off of the joint in daily usage
Delivery	Available as a customer-specific item or via the REHAU standard stock range	Available via the REHAU standard stock range Minimum quantities and short delivery times	Available as a customer-specific item or via the REHAU standard stock range
Processing	Conventional processing ▪ Can be processed using all standard adhesive types ▪ Processing using mechanical adhesive application ▪ For straightline edgebander and edgeband processing centre	Versatile processing ▪ Can be processed using laser, hot-air, plasma and NIR ▪ Suitable for straightline edgebander and edgeband processing centre	

[1)] For components with increased exposure to moisture, the use of a RAUKANTEX pro OMR **O**ptimised **M**oisture **R**esistance edgeband is recommended

02.03 RAUVISIO noir composite pressed board

RAUVISIO noir composite is available as pressed board in large format (1,300 x 2,800 mm) made of HPL noir, substrate board (MDF or splint) and colour-matched HPL balancing sheet.

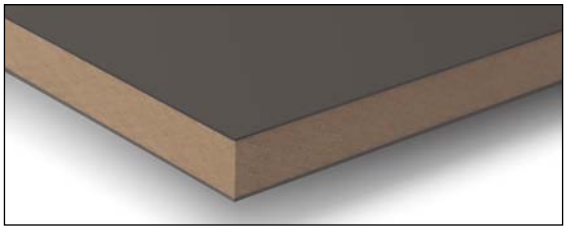


Fig. 02-2 RAUVISIO noir composite pressed board

02.04 RAUVISIO noir worktop

The RAUVISIO noir worktop is available as laminated board made of a HPL (High Pressure Laminate) board of a chipboard at the core and a suitable HPL balancing sheet or a brown cost-effective back-pull foil. The standard dimension comes to 1,300 x 4,100 mm. This is available with a core of 38 mm.

Fig. 02-3 RAUVISIO noir worktop

02.05 RAUVISIO noir compact

RAUVISIO noir compact is a non-porous, homogeneous, extremely dense material which is produced by using pressure and heat as a 12 mm thick laminate panel. The core consists of impregnated papers in matching colors, which form the duroplastic character of the material. The two face sides correspond to the noir surface and reflect the same properties. Both sides of the surface are covered with a protective film. The standard dimension is 1300 x 4100 x 12 mm.

03 Transport, packaging and storage

03.01 Transport and loading information

The external packaging must be immediately checked for signs of damage upon receipt of the goods.

- If damage has occurred, open the packaging in the presence of the freight carrier and record the damage to the goods.
- This must be confirmed by the driver of the haulage company with their name, haulage company, date and signature.
- The damage must be reported to the freight carrier within 24 hours.

In the event of a failure to comply with this, the freight carrier's insurance company will not accept liability!

Transport

Under no circumstances should the boards be exposed to temperatures higher than 50 °C during transport to avoid thermal overloading of the adhesive/laminate system. Under thermal load, there could be reciprocal actions between the coatings that may result in warping. This would affect the flatness of the board.

Delivery

Boards are shipped loaded on square timber battens or pallets to ensure they are kept flat.

- Ideally, packaging units should be unloaded with a forklift or similar appliance.
- If the required equipment is not available, the boards can be unloaded by hand. In this case, ensure that the boards do not become dirty and are not subjected to any mechanical loads.
- When unloading by hand, wear suitable protective equipment, e.g. gloves, as sharp edges can cause cuts.
- The use of transport aids such as suction lifters, lift handles and board transporters is recommended for handling; see also chapter “4.1 Unpacking”.
- Bending is not permitted when transporting the RAUVISIO boards horizontally.

03.02 Packaging

Protect the boards with foam wrap.

In the case of RAUVISIO noir, it is essential to protect the narrow sides and the surface. Particularly when moving, picking and further processing the boards, avoid or remove any dirt that may get between the individual boards. Otherwise, the stack pressure/dead weight of the boards can inevitably lead to pressure marks on the laminate surface.

Protect the surfaces with foam wrap.

This will prevent marks being caused on the surface when stacking components.

Please observe the handling instructions for our RAUVISIO products.

03.03 Internal transport and storage

Internal transport
RAUVISIO noir panel material must be kept flat, level and fully supported along its entire length during transportation. Transport within the supplied packaging is recommended to achieve this (re-packing is not recommended).

Storage
RAUVISIO noir is supplied on pallets or square timber battens covered with appropriate protective boards. The packaging units with RAUVISIO noir are stackable. Due to the stack pressure, however, it is not permitted for more than four packaging units to be stacked on top of one another.

⚠

Protecting the packaging units:
The packaging units are to be protected against damage, large fluctuations in temperature and humidity, as well as high UV levels of artificial lighting or direct sunlight.

Store boards flat and level.
RAUVISIO noir board material must be stored and transported in a flat and level position with support along its complete length. It is recommended to store boards on the supplied pallet. Alternatively, boards must be supported by a minimum of four evenly spaced timber battens of equal size (see diagram). This is necessary to prevent bending or warping.

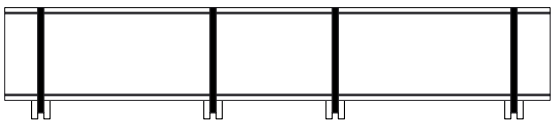


Fig. 03-1 Storage on four timber battens

In the event of storage in conditions not in line with those described above (pallet or on at least four equal battens), no assurances can be given against warping.

The material must be stored in closed, heated rooms in which the room temperature is between 15 and 25 °C and the relative humidity is between 40 and 60%.

Prior to opening the packaging units, boards must be allowed to acclimatise to room temperature for at least 48 hours.

Prior to returning opened or partially used packaging units to storage, it must be ensured that the cover plate is replaced on top. This is to prevent contamination and uneven temperature/humidity penetration (due to drafts or heating air), and therefore it counteracts warping effects as well as surface damage.

04 Prior to processing

04.01 Unpacking

Before opening the packaging unit, the goods must be allowed to acclimatise to room temperature for at least 48 hours or longer depending on the season.

Carefully unpack the boards.
When opening the packaging, ensure that the surfaces are not damaged by sliding or sharp objects. Suitable lifting equipment must be used to separate individual boards.

Open the packaging with scissors.
Do not use a sharp blade!

1. Cut the packaging tape.
2. Cut the protective film away from sheets.
3. Two people and four vacuum lifting pads lift the uppermost cover board vertically towards the top with care and without displacing it or remove the box in the case of individual packaging.
4. Dirt which can get trapped between the individual boards must be completely avoided or removed.

04.02 Checking the boards

Please check the RAUVISIO noir system components for the following points before further processing and therefore the finishing of the goods (see chapter "4.4 Documents for material warranty"):

- External damage such as cracks or marks
- Surface damage or blemishes
- Flatness (when purchasing pressed board)
- Colour consistency within the production batch

The RAUVISIO noir surfaces are always delivered with a protective film. Despite this protective film, there may be occasional minor defects in the surfaces on delivery. These cannot be entirely excluded for technical production reasons and do not constitute a direct reason for complaint.

When grouping different boards into one order, it is to be ensured that only boards of the same production number are used. Uniformity of colour across production batches must be checked prior to processing. Colour consistency must be checked in natural daylight, although bright sunlight should be avoided. In case of deviations a colorimeter should be used.

The costs incurred for checking the above-mentioned points cannot be accepted by REHAU. This also applies to consequential costs incurred in the further processing of defective goods.

04.03 Conditioning

RAUVISIO noir and all other materials to be processed such as the adhesive and edgebands must be conditioned at room temperature (at least 18 °C) for a sufficient period of time (at least 48 hours).

Processing is also carried out at room temperature. It must be ensured, particularly in the colder months, that all boards are acclimatised. If there is insufficient acclimatisation of the boards due to the stack size, the exposure time should be adjusted accordingly.

04.04 Documents for material warranty

In order to process complaints, the delivery notes for the goods and the shipping labels must be retained. The imprint on the narrow side of the substrate can be used to clearly identify the production batch. This must be given to the REHAU sales office in the event of a complaint.

05 Processing RAUVISIO noir

05.01 Proper handling of RAUVISIO boards

Placing the boards on the machine table
The machine table must be large enough, must not have any sharp edges and must have been thoroughly cleaned.

Alternatively: cover the machine table with a clean base (wooden board, box, etc.).

Formatting the boards
When formatting with a saw, please observe the instructions for placing the board on the machine table (see above). In this case, work with a scoring blade.

Between the processing steps
After milling/sawing, all residue must be removed and all surfaces cleaned.

For transport, place the boards vertically and individually on appropriate trolleys.

Alternatively: Stack the workpieces in layers with clean and padded cardboard/foam material inserted in-between on a pallet.

Edging the workpieces
Anti-static agents should be used whilst edgeband is being applied. Ensure that the boards are fed into the system cleanly and safely.
Any loose chipping created must be safely removed via extraction.

Drilling and milling
Extraction must be used during drilling/milling operations to ensure that the swarf is removed.

Packing the workpieces
Stack the workpieces in layers with clean and padded cardboard/foam material inserted in-between each layer on a pallet.
Use a transport lock to prevent damage due to slipping or similar.

05.02 Processing individual laminates

Substrate
Wooden substrates, lightweight boards or composite material substrates are considered for use as a substrate for RAUVISIO noir. To meet the high demands on the surface, it is critical that the substrate material is selected with the intended application in mind. In principle the substrate should be chosen so as to ensure sufficient flatness. Critical for a good appearance is the surface structure of the substrate. A fine surface structure is a prerequisite for an even high-quality surface. An MDF board or chipboard is recommended as a substrate material here. They have a fine surface structure from which only very small particles are pulled out during processing (sawing, milling, drilling, adhesion). An MDF substrate board is recommended for a high-quality surface finish.

Adhesive
In addition to selecting the suitable substrate board, selection of the correct adhesive is important to ensure board quality. Individual component PU hotmelts have become increasingly common in recent years. These adhesives can be easily applied to the board or substrate using rollers. A short press-down time is usually sufficient to ensure high initial strength. Pressing with a continuous roller lamination system is recommended to ensure a high-quality surface finish. It is important to select an adhesive with a high initial tack – alternatively, the result can be influenced using squeeze pressure in the stack. Good results are also achieved with conventional PVAC dispersion adhesives using cycle presses. Here, the hardening happens in the squeezer under pressure and temperature – the ideal pressure settings should be determined depending on the component size and the recommendation of the squeezer manufacturer. For gentle hardening, the temperature should be between 60 °C and 70 °C. Depending on the ambient parameters, the process, the adhesive and the substrate board, a process cycle should be between 1 and max. 3 minutes. These should, however, also be verified in the actual production conditions. As a rule, observe the processing recommendation/guarantees of the adhesive manufacturer when using adhesives. Ensure adequate adhesion/final strength during each process. A pull-off test to check the bond is recommended for this. Especially for new product structures and special applications, bond strength should be independently checked and verified.

Balancing sheet
Ensuring a functional overall system that maintains dimensional stability under fluctuating temperature and moisture conditions requires a balancing sheet that guarantees stability under changing climatic conditions. Generally a symmetrical composition is optimum when it comes to warpage. However, it is not always possible to create a symmetrical design. For this reason other materials may be used for the

balancing sheet. Materials such as CPL (Continuous Pressing Laminates) or other polymeric materials may be used depending on application. Based on experiences with respect to warpage, the REHAU system is based on a symmetrical thermoset structure and offers matched, finished components. This system is also recommended for in-house pressing.
For non-standard applications, such as melamine-coated wooden substrates, tests may be required to verify quality of the complete board.
In general, resistance to humidity and warpage cannot be guaranteed in the case of asymmetrically bonded elements.

05.03 Mechanical processing of the pressed board

Sawing/milling/drilling
RAUVISIO noir can be processed with most approved woodworking tools. When cutting RAUVISIO noir, a scoring saw blade must be used. To allow accurate processing, it must be ensured that all tools are sharp, and optimal machine settings are used. Due to its robust and brittle surface, it is recommended to work with cutting materials made from chrome vanadium alloys or diamond. For milling, milling cutters with a blade angle of > 45° that can make an oblique cut are proven of value.

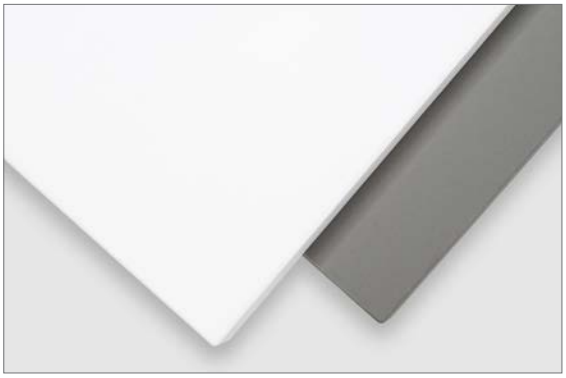
If you have questions regarding processing, a REHAU applications engineer would be happy to help you further.

05.04 Edging

The use of RAUKANTEX edgeband material is recommended to create an interlocking join between the RAUVISIO noir surface and the narrow surface.
The best visual results are achieved by using RAUKANTEX pro. No joint line is visible here thanks to the colour-matched polymer functional layer of the edgeband colour. A range of matching RAUKANTEX ABS (acrylonitrile butadiene styrene) edgeband is available to compliment this product.

The correct processing method is described in the usage instructions Technical delivery specifications sales RAUKANTEX (DML00513). For more information, please contact your REHAU sales office. The resulting component quality (e.g. adhesion of the edgeband, appearance and application qualities) depends on the machine configuration and the raw materials and must be checked by the processor.

Optimum machine settings, tool configuration and cutting speeds are to be established individually prior to production using a series of samples; the REHAU Applications Engineering Department will be happy to support you with this.



REHAU offers its customers both the standard primed edgeband RAUKANTEX pure and the 100% polymer zero-joint edgeband RAUKANTEX pro. For components exposed to moisture, use of the zero-joint edgeband RAUKANTEX pro OMR is recommended.

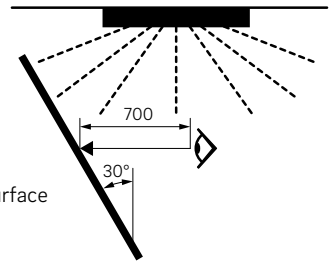
06 Technical data

RAUVISIO noir is a non-porous, homogeneous, high-density material produced using the impact of pressure and heat. The core consists of waterproof papers that develop the thermoset character. The decorative surface also consists of a waterproof paper furnished with an electron beam-hardened acrylate hard coat layer. RAUVISIO noir is designed for furniture/design surfaces that are used in vertical or horizontal interiors. The surface is protected by a PE film, which must only be removed at the installation location.

Product data	Test standard	Laminate	Pressed board with colour-matched balancing sheet	Edged component
Thickness	Based on DIN EN 438-2	0,9+/- 0,1 mm		
Pressed board substrate MDF 17 mm	Based on DIN EN 438-2		18,8 +/- 0,4 mm	18,8 +/- 0,4 mm
Pressed board substrate swarf 17 mm	Based on DIN EN 438-2		18,8 +/- 0,4 mm	
Width	Based on DIN EN 438-2	1300 +10/-0 mm	1300 +10/-0 mm	Dimension +/- 0,5 mm
Length	Based on DIN EN 438-2	2800 +10/-0 mm	2800 +10/-0 mm	Dimension +/- 0,5 mm
Angle deviation	Based on DIN EN 438-2	90°+/-0,3°	90°+/-0,3°	90°+/-0,3°
Evenness	Based on DIN EN 438-2	60 mm		
Edge straightness	Based on DIN EN 438-2	≤ 1,5 mm		
Edge defects	As per technical drawing	≤ 15 mm	≤ 15 mm	

Product data	Test standard	Worktop with back-pull foil	Worktop with matching HPL balancing sheet	Compact board
Thickness	Based on DIN-EN 438-2			12 +/- 0,6 mm
Pressed board substrate swarf 38 mm	Based on DIN-EN 438-2	39 +/- 0,4 mm	40 +/- 0,4 mm	
Width	Based on DIN-EN 438-2	1300 +10/-0 mm	1300 +10/-0 mm	1300 +10/-0 mm
Length	Based on DIN-EN 438-2	4100 +10/-0 mm	4100 +10/-0 mm	4100 +10/-0 mm
Angle deviation	Based on DIN-EN 438-2	90°±0.3°	90°±0.3°	90°+/- 0,3°
Evenness	Based on DIN-EN 438-2			≤ 3 mm/m
Edge straightness	Based on DIN-EN 438-2			≤ 1,5 mm/m
Edge defects	As per technical drawing	≤ 15 mm	≤ 15 mm	≤ 15 mm

Visual properties	Test standard	Requirements	Test result
Gloss level of the surface	AMK-MB-009, 04/2013	Measurement with 60° geometry Measurement with 85° geometry	≤ 2 GLE ≤ 10 GLE
Colour	AMK-MB-009, 04/2013	No significant change to the limit sample; even covering properties	Fulfilled
Surface	AMK-MB-009, 04/2013	Uniform surface, surface defects must not affectthe overall appearance from a distance of 0.7 m. A flawless surface cannot be guaranteed due to the industrial production process, small imperfections and surface irregularities are permissible. Spots, dirt, imperfections and similar surface defects; fibres, hairlines or scratches	Fulfilled ≤1 mm²/m² ≤10 mm/m²
Light fastness	Based on DIN EN ISO 4892-2, Process B Duration of the test: to DIN EN ISO 105 B01–B06 Assessment of the sample: to DIN EN ISO 105 A02	Assessment according to the blue scale Assessment according to the grey scale	Level 7 ≥ Level 4



Material properties of the layer material	Test standard	Requirements	Test result
Density	EN ISO 1183	≥ 1.35 g/cm²	Fulfilled
Resistance to immersion in boiling water	DIN EN 438-2	≥ Level 4	Fulfilled
Dimensional accuracy during increased temperature	DIN EN 438-2	~0.55% longitudinal ~1.05% transversal	Fulfilled
Resistance against impact stress (small ball)	DIN EN 438-2	≥ 20 N	Fulfilled
Resistance to impact stress for the laminate 0.9mm (big ball)	DIN EN 438-2	1,000 mm drop height Impression less than 10 mm	Fulfilled
Resistance to impact stress for compact 12mm (big ball)	DIN EN 438-2	1800 mm drop height Impression less 10 mm	Fulfilled
Susceptibility to cracking if under load	DIN EN 438-2	≥ Level 4	Fulfilled
Elasticity model Compact 12mm	DIN EN ISO 178	> 9000 N/mm²	Fulfilled
Bending strength Compact 12 mm	DIN EN ISO 178	> 80 N/mm²	Fulfilled

Surface properties of the coating material	Test standard	Requirements	Test result
Resistance to surface abrasion	DIN EN 438-2	≥ 200 IP	Fulfilled
Resistance to water vapour	DIN EN 438-2	Level 5	Fulfilled
Resistance to dry heat (160 °C)	DIN EN 438-2	Level 5	Fulfilled
Resistance to moist heat (100 °C)	DIN EN 438-2	Level 5	Fulfilled
Scratch-resistance	DIN EN 438-2	Level 4	Fulfilled
Micro-scratch resistance	DIN EN 438-2	Procedure A Procedure B	≤ 15% change to glossiness ≥ Class 4

Food and hygiene properties	Test standard	Requirements	Test result
Chemical resistance	DIN 68861/T1	1A	See "Substances" table page 16
Contact with foodstuffs – overall migration	EN 1186	Acetic acid 3% Ethanol 50% Ethanol 95% Isooctane	≤ 10 mg/dm² ≤ 10 mg/dm² ≤ 10 mg/dm² ≤ 10 mg/dm²
Hygiene	NSF/ANSI 35	Conformity to NSF/ANSI 35	Fulfilled
Antibacterial effect	JIS Z 2801:2012	Antibacterial activity of Staphylococcus aureus and Escherichia coli after 24 h	≥ 3 log reduction ≥ 99.9% reduction

Environmental properties	Test standard	Requirements	Test result
VOC emission	AFNOR NF EN ISO 16000-9	Classification TVOC emission	A+ ≤0.2 mg/m³
Phenolic content	AFNOR NF EN ISO 16000-9	Phenol detection limits	<0.002 mg/m³
Formaldehyde emission	EN 13986	Classification E1	Fulfilled

Component tests on the edged component and noir compact

The delivery contents from REHAU comprise RAUVISIO noir as of the individual laminate and pressed board with or without edging. The details below refer to the finished edged component pressed by REHAU with RAUKANTEX noble matt pro and compact plate. Attention is drawn to the fact that REHAU accepts liability under warranty law for its delivery contents only in accordance with the REHAU specification, but not for any pressing or edging processes performed outside of REHAU. The results of the component tests on the finished edged component are particularly dependent on the machine and process parameters to be set by the customer for the processing of RAUVISIO noir, on the use of suitable adhesives and edgebands, as well as on the observance of REHAU's usage instructions in accordance with this technical information publication. REHAU Applications Engineering Department provides appropriate support for the setting of machine and process parameters. Please note that our advice relating to technical applications is correct to the best of our knowledge, but we cannot accept any liability for this free service, which is provided without obligation.

Component tests	Test standard	Test result
Temperature resistance	Assessment according to AMK-MB-001	Passed
Infiltration of water vapour	Assessment according to AMK-MB-005, module 1	Passed
Humid climate resistance	Assessment according to AMK-MB-005, module 2	Passed
Alternating climate resistance	Assessment according to AMK-MB-005, module 3	Passed

1) The following components were tested: noir pressed to 17-mm MDF, noir pressed to 17-mm chipboard, noir worktop pressed to 38-mm chipboard and noir compact
2) Testing was done according to the test standard: 2 PfG 2507/08.2014

Protective film
The protective film is intended to protect the surface from dirt and damage that may occur during handling and processing.
The protective film and its adhesive are not intended to protect against moisture, temperature or UV rays.
RAUVISIO noir surfaces must be stored in a closed room protected from UV rays in conformance with the specified storage conditions (see point 03.03).
If these conditions are met, the protective film can be removed without any problems at least within the first 12 months after delivery.
If the duration of storage is exceeded or the storage conditions are not observed, the adhesive may cross-link, which can lead to residues after the protective film is removed.
Possible adhesive residues can be removed with polymer cleaner, adhesive remover or white spirit/ mineral spirits.

07 Installation guidelines

1. Fabricated components should only be transported on the original packaging unit.
2. Always unload packaging units sideways and from the middle.
3. Fabricated components should always be stored on the original pallet or using four equal battens.
4. The storage of the fabricated components must not be stored outside or in damp environments.
5. Fabricated components should always be stored appropriately at the installation location and not exposed to strong UV light sources.
6. Acclimatise fabricated components prior to installation for at least 24 hours at room temperature (min. 18 °C). At delivery temperatures below 0 °C, acclimatise the components for at least 48 hours on all sides.
7. No objects are to be rested on raw boards and fabricated components as these could cause damage.
8. RAUVISIO noir is suitable for vertical and horizontal applications indoors. Enquire and check with the manufacturer about special application cases if necessary.
9. All materials and components must be checked for damage or defects prior to processing/assembly.
10. Temporary storage must take place prior to installation exclusively in the original packaging in frost-free and closed rooms.
11. Load-bearing substructures, which are firmly connected to each other, are to be aligned so that they are flat and vertical.
12. To avoid stress cracks, no bending should occur during processing and assembly.
13. Do not bring unprotected corner connections of wooden substrates into contact with moisture prior to installation.
14. In the case of wooden substrates, all cut edges and raw board edges must be sealed so that they are watertight.
15. All drilled holes in the wooden substrates must be sealed during assembly so that they are watertight.
16. Tools must not be used on the surface.
17. No strong solvents, special cleaners (e.g. drain cleaners, industrial cleaners, abrasive cleaners or abrasive cleaning cloths) or strong chemical substances may be used on the surface.
18. "Magic erasers" have proved to work best for cleaning matt surfaces.
19. Do not stand on unassembled or assembled RAUVISIO noir components.
20. Installation for indoor vertical and horizontal applications only.
21. For protection from water vapour or too high temperature in the area of the dishwasher and oven, the adapter from edgeband to rear material must be additionally protected with a constructive cover. Vapour sheets are available with specialist dealers and the device manufacturer.
22. When creating sections, observe that they are predrilled in the corner area (min. 10-mm drill) or are created with the router (min. 10-mm milling tool). This helps in avoiding notch effects due to stress that may lead to crack formation.

⚠ **Attention! When installing the sink and all other cut-outs and connections, this point must be noted!**

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08 Care and usage instructions for the end user

The non-porous, homogeneous coating layer is hygienic and suitable for contact with foodstuffs as well as being resistant to fungus and bacteria.

RAUVISIO noir is resistant to most substances found in the household. Prolonged exposure to aggressive substances can leave behind marks or damage the material.

The table shows the media tested and the exposure time:

Substances	**Stress group 1A RAUVISIO noir** D	Result
Acetic acid	16 h	5
Citric acid	16 h	5
Ammonia water	16 h	5
Ethyl alcohol	16 h	5
Red wine	16 h	5
Beer	16 h	5
Cola	16 h	5
Coffee	16 h	5
Black tea	16 h	5
Blackcurrant juice	16 h	5
Evaporated milk	16 h	5
Water	16 h	5
Petrol	16 h	5
Acetone	16 h	5
Ethyl-butylacetate	16 h	5
Butter	16 h	5
Olive oil	16 h	5
Mustard	16 h	4
Onion	16 h	5
Disinfectants	16 h	5
Cleaning agent	16 h	5
Cleaning solution	16 h	5

T Exposure time

A Requirement as classification code as per DIN EN 12720:2009-07

RAUVISIO noir is a warm thermoset surface material that is pleasant to the touch.

No scouring or alcoholic cleaning agents may be used for cleaning; there is a risk that these will attack and damage the surface. Coarse dirt must first be cleaned using a soft cloth (microfibre cloth) and soapy water. Afterwards, you can use a “magic eraser” to create a homogeneous, matt appearance.

Assessment according to DIN EN 12720 (07/2009):

Chemical resistance	**Result**
5	No visible change
4	Just noticeable change in gloss or colour
3	Slight change in gloss or colour; the structure of the test surface is not changed
2	Heavy marks visible; the structure of the test surface is however largely undamaged
1	Heavy marks visible; the structure of the test surface is changed
0	Test surface severely changed or destroyed

Notes

Notes

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Exactly where is shown at
www.rehau.com/locations

Our verbal and written advice with regard to usage is based on years of experience and standardised assumptions and is provided to the best of our knowledge. The intended use of REHAU products is described comprehensively in the technical product information. The latest version can be viewed at www.rehau.com/TI. We have no control over the application, use or processing of the products. Responsibility for these activities therefore remains entirely with the respective user/processor. Where claims for liability nonetheless arise, they shall be governed exclusively according to our terms and conditions, available at www.rehau.com/conditions, insofar as nothing else has been agreed upon with REHAU in writing. This shall also apply for all warranty claims, with the warranty applying to the consistent quality of our products in accordance with our specifications. Subject to technical changes.

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