Engineering progress
Enhancing lives

RAUVISIO grip

Technical information

REHAU

Table of contents

This “RAUVISIO grip” technical information is valid from June 2022.

Our current technical documentation is available to download at **www.rehau.com/surfaces**.

All dimensions and weights are reference values. Subject to errors and changes.

01 Information and safety instructions

Validity
This technical information is valid worldwide.

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 latest version of the document from your local retailer, your REHAU sales office or at **rehau.com/surfaces**.

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 instructions

 Legal notice

 Important information

 Your advantages

 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 latest valid technical information must be observed in processing/installation and use of RAUVISIO grip. 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, including end customers, are informed about the necessity to observe the current technical information publication as well as the care and usage instructions for RAUVISIO grip 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 who press RAUVISIO grip into anti-slip laminated boards for resale:
Please inform your customers of the need to follow the current technical information and make it available to them.

Note for fabricators of pressed RAUVISIO grip boards:
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, instructions on 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
Strictly observe all applicable safety and environmental regulations as well as the regulations of the trade supervisory authority and the employers' liability insurance association. These always take priority over the instructions and recommendations provided in the technical information.

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

Adhesives and additional tools
Strictly observe the safety instructions for any adhesives.

Always store work equipment 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 grip is a coextruded material made from polystyrene and thermoplastic elastomer that is not harmful to the environment. 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 grip does not pose any specific risk of explosion.

Disposal code in accordance with the Waste Catalogue Regulation:
- 17 02 03/Construction and demolition waste consisting of wood, glass or polymer
- 12 01 05/Waste from mechanical shaping processes and from the physical and mechanical surface finishing of metals and polymers (polymer shavings and turnings)

Fire behaviour
Due to its composition of styrene and elastomer, the RAUVISIO grip demonstrates favourable fire behaviour and is categorised to DIN 4102-B2 as normal flame resistance.
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 construction 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 fire-fighting, wear suitable protective clothing and if necessary standalone breathing apparatus.

02 Product desription

02.01 Product description

As an anti-slip laminate, RAUVISIO grip represents the latest trends in furniture design and interior design. As the joint between the edgeband and board is virtually invisible, the overall impression created is that of a cast product. Thanks to its excellent anti-slip effect when combined with a substrate board, RAUVISIO grip replaces high-grade anti-slip mats that are used as inserts.
RAUVISIO grip is a multi-layer coextruded polymer laminate produced from a styrene polymer base layer and an elastomer top layer.
The 1.0 mm thick material combination gives RAUVISIO grip a high elasticity that positively affects the surface smoothness after processing. Being a pre-fabricated composite part with wooden substrate, a permanent connection is guaranteed.

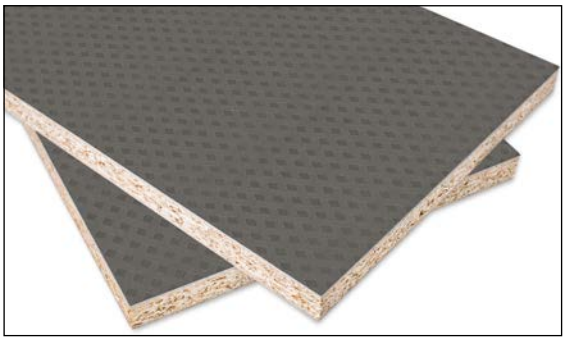
02.02 Edgeband collection

The colour-matched ABS-UNI edgebands enable the production of horizontal drawer elements as well as equipment for special and camping vehicles, buses, etc. All the edgebands are also available as RAUKANTEX pro in a jointless version.

Fig. 02-1 Edgeband collection for RAUVISIO grip 98492 and 91426

02.03 RAUVISIO grip pressed board

RAUVISIO grip made of anti-slip laminate and melamine-coated chipboard (white on both sides) is offered as a pressed board in large format (2,800 x 1,000 mm).



03 Transport, packaging and storage

03.01 Transport and loading information

⚠

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 haulier within 24 hours. In the event of a failure to comply with this, the haulier's insurance company will not accept liability!

Transport

Under no circumstances should the laminates be exposed to temperatures higher than 60 °C during transport to avoid thermal overloading of the adhesive/laminate system.
An increased thermal load could create interactions between adhesive and laminate that cause the board to warp. Due to the stack pressure, it is not permitted for more than five packaging units to be stored on top of one another during transport.

Delivery

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

- Following delivery, packaging units should be unloaded with a forklift or similar appliance.
- If the appropriate equipment is not available, the boards can be unloaded by hand.
- In this case, ensure that the boards do not become dirty, are not subjected to any mechanical loads and are not dragged over one another.
- It is also essential to use an appropriate base to place a board upright over another board.
- When unloading by hand, wear safety gloves as sharp edges can cause cuts.
- The use of transport aids such as suction lifters, lift handlesand board transporters is recommended for handling; see also chapter "4.1 Unpacking".
- When transporting the RAUVISIO grip boards in horizontal position, a deflection is not allowed.

03.02 Packaging

⚠

Protect the boards with foam wrap.
With RAUVISIO grip, the narrow edges and surfaces must be protected. Particularly when moving, picking and further processing the boards, avoid or remove any dirt or debris that may get between the individual boards. Otherwise the stack pressure/dead weight of the boards will inevitably cause indentations in the laminate surfaces.
Stacked boards may not be moved due to the high pressure between the individual boards as this can create scratches on the surface.
Protect the surfaces with foam wrap. This will prevent marks being caused on the surface when stacking components and the boards will rest directly over each other.

ⓘ

Please follow our instructions for handling RAUVISIO products.

03.03 Internal transport and storage

Internal transport
While being moved, RAUVISIO grip boards must be fully supported along their complete length, and kept flat and level.
Transport within the supplied packaging is recommended to achieve this (re-packing is not recommended).

Storage
RAUVISIO grip is supplied on pallets or square timber battens covered with appropriate protective boards. The packaging units of RAUVISIO grip can be stacked. Due to the stack pressure, however, it is not permitted for more than five packaging units to be stored 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 grip 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 of the boards (e.g. due to draughts or heated air) which may also lead to surface damage.

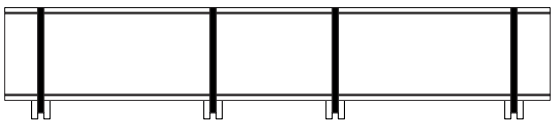


Fig. 03-1 Storage on four timber battens

In the event of storage in conditions not in line with those described above (pallet or on at least four equal timber battens), the company REHAU cannot give any assurances against warping.

The boards 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%.

Before opening the packaging unit, the goods must have an acclimatisation period at room temperature of at least 48 hours or longer depending on the season.

After opening and removing a quantity of the product, it must be ensured that the cover panel remains on top of the goods during re-storage, in order to prevent soiling and asymmetrical temperature/humidity effects.

04 Before processing

04.01 Unpacking

Before opening the packaging unit, you must allow boards to acclimatise to room temperature for sufficient time – at least 48 hours or longer, depending on the season.

Carefully unpack the boards.
Care must be taken whilst opening the packaging to ensure that surfaces are not damaged by sharp tools. 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. With 2 people, or 4 suction cups carefully lift the top board vertically, without sliding it, or carefully remove carton if individually packed.
4. Remove any detritus or contamination that gets between the individual boards.

04.02 Checking the boards

Please check the RAUVISIO grip 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 cracking or notches
- Surface damage or blemishes
- Colour match with the order
- Colour consistency within the production batch

There could be isolated surface defects that cannot be entirely excluded in the production process but which do not constitute a direct reason for complaint.

When processing boards with different batch numbers, it is imperative to check the colour compatibility prior to processing.

Colour consistency should be checked in natural daylight, although bright sunlight should be avoided. In case of deviations a colorimeter should be used.

Any costs resulting from checking the above elements are not borne by REHAU. This also applies to consequential costs incurred in the further processing of defective goods.

04.03 Conditioning

Prior to processing, RAUVISIO grip and all other materials including substrate board, adhesive, balancing sheet and edgebands must be fully 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 is to be ensured, in particular in the colder months, that all boards/laminate are acclimatised. If there is incomplete acclimatisation of the laminate due to the stack size, the duration should be adjusted accordingly.

04.04 Documents for material warranty

Delivery notes and shipping labels should be retained to aid batch traceability in the event of a technical issue.

The inkjet printing on the edge of the substrate can also be used for the unique identification of a production batch. This must be given to the REHAU sales office in the event of a complaint.

05 Processing of RAUVISIO grip

05.01 Proper handling of RAUVISIO grip 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, cardboard 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 boards
Stack the workpieces in layers with clean and padded carton/foam material inserted in-between each layer on a pallet. Use a transport lock to prevent damage due to slipping or similar.

05.02 Mechanical machining of the pressed board

Cutting/milling/drilling
RAUVISIO grip can be processed with most approved woodworking tools. When cutting RAUVISIO grip, 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. It is recommended that the optimal machine settings are determined by means of trials prior to starting production.

05.03 Edgebands

The use of RAUKANTEX edgeband material is recommended to create a consistent joint between the RAUVISIO grip surface and the narrow edges. The best visual results are achieved by using RAUKANTEX pro. No joint line is noticeable here thanks to the polymer functional layer colour matched to the edgeband.
The RAUKANTEX edgeband product range can be supplied to match the surface in the materials ABS (acrylonitrile-butadiene-styrene) or PP (polypropylene).

Proper processing is described in the usage instructions
TLV RAUKANTEX pro (PMMA and ABS) as well as RAUKANTEX visions/magic 3D (V-M25/1) and RAUKANTEX color. For further information, please contact your REHAU sales office. The resulting component quality (e.g. adhesion of the edgeband, appearance and application properties) depends on the machine settings and the board quality used and must be checked by the fabricator.
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.
Adjusting the flat (adhesive) scraper blades is critical as it can scratch the surface due to its anti-slip properties. It is recommended to run a test piece with the adhesive removal blades turned on, otherwise run the machine with these blades turned off.

Fig. 05-1 RAUVISIO grip with laminated edgebands

REHAU offers its customers both the standard primed edgeband RAUKANTEX pure and the 100% polymer zero-joint edgeband RAUKANTEX pro.

06 Technical date

RAUVISIO grip is a polymer laminate that is made up of a coextruded styrene copolymer and an elastomer layer.

The polymer laminate is designed for finished drawer bottoms with anti-slip properties.

Product data	**Test standard**	**Laminate**	**Pressed board with directly laminated substrate board [1)]**
Thickness	as per technical drawing based on DIN EN 438-2	1,0 ± 0,10 mm	
Pressed board Chip substrate board, white 15 mm	as per technical drawing based on DIN EN 438-2		16 mm+/- 0,4mm
Width	as per technical drawing based on DIN EN 438-2		1000 mm +/- 1,5mm
Length	as per technical drawing based on DIN EN 438-2		2800 mm ± 10,0 mm
Angle deviation	as per technical drawing based on DIN EN 438-2	90° ± 0,3°	90° ± 0,3°
Edge defects	as per technical drawing	15 mm	15 mm

[1)] no guarantee for component tests in accordance with AMK

Visual properties	Test standard	Requirements	Test result
Colour	AMK-MB-009, 09/2010	No visible change compared to the master sample; EVEN COVERAGE properties	Requirements met
Surface	AMK-MB-009, 09/2010	Uniform surface, surface defects must not affect the overall appearance from a distance of 0.7 m. A completely flawless surface cannot be guaranteed due to the industrial production process; small blemishes and surface irregularities are permissible.	Requirements met
Light fastness	As per DIN EN ISO 4892-2, B procedure Duration of the test: to DIN EN ISO 105 B01–B06	Assessment according to the blue scale	Grade 6

Material properties	Test standard	Requirements
Laminate thickness	DIN EN ISO 1183-1 (05.04)	1,02 - 1,06 g/cm3
Fire behaviour	DIN 4102/1	B 2
Material purity/sand content	Residue on ignition according to test specification	≤ 1%

Surface properties	Test standard	Requirements	Test result
Chemical resistance [1)]	DIN 68861 / T1	1C	See „Substances" table Page 14
Performance in dry heat	DIN 68861/T7	Stress group min. 7 C	No change at 100°C
Performance in moist heat	DIN 68861/T8	Stress group min. 8 A	No change at 100°C
Performance in water vapour	DIN 438-2	Grade 5	
Scratch resistance	DIN 68861/T4		cClass 4D

[1)] The chemical resistance test according to DIN 68861-1 covers the substances listed in the table on page 14. Other substances are not explicitly tested and need to be tested independently by the customer.

07 Installation guidelines

1. The raw boards and preassembled elements should only be transported on the original packaging unit.
2. Always unload/load packaging units with a forklift from the short side in the centre.
3. The raw boards and fabricated elements should always be stored on the original pallet or with four-timber support.
4. The raw boards and fabricated elements must not be stored outside or in damp rooms.
5. Raw boards and preassembled elements should always be stored appropriately at the installation location and not exposed to strong UV light sources.
6. Acclimatise preassembled elements prior to installation for at least 24 hours at room temperature (min. 18 °C). At delivery temperatures below 0 °C, acclimatise the elements for at least 48 hours on all sides. Air must reach to all sides of each element.
7. No objects are to be rested on raw boards and fabricated elements as these could cause damage.
8. RAUVISIO grip is suitable for horizontal and vertical 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/installation.
10. Temporary storage must take place prior to installation exclusively in the original packaging in frost-free and closed rooms.
11. Do not bring unprotected corner connections of wooden substrates into contact with moisture prior to installation.
12. In the case of wooden substrates, all cut edges and raw board edges must be sealed so that they are watertight.
13. No strong solvents, special cleaners (e.g. drain cleaners, industrial cleaners, lubricants or abrasive cleaning cloths) or strong chemical substances must be used on the surface.
14. Tools must not be used on the surface.
15. Severe contamination can create scratches on the surface when cleaning. Always remove contamination carefully using a cloth soaked with mild cleaning agent.
16. Do not stand on unassembled or assembled RAUVISIO grip elements.

08 Care and usage instructions for the end user

RAUVISIO grip is resistant to most substances found in the household. Prolonged exposure to aggressive substances can leave behind marks or damage the material. The following table shows the chemical resistance to common substances.

The following table summarizes the substances tested and their exposure time:

Substances	**Stress group 1A/1B/1C RAUVISIO grip**	
	T	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	1
Acetone	16 h	1
Ethyl-butylacetate	16 h	1
Butter	16 h	4
Olive oil	16 h	5
Mustard	16 h	5
Onion	16 h	5
Disinfectants	16 h	3–4
Cleaning agent	16 h	5
Cleaning solution	16 h	5
Black ball pen ink	16 h	1–2
Stamp ink	16 h	5

T Exposure time

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

Do not use abrasive cleaners or cleaning agents based on alcohol, petrol or acetone. There is a risk of them affecting and damaging the surface. Use a soft cloth and soapy water to clean coarse dirt.

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

We're never far away.
For our locations, visit
www.rehau.com

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.

Rheniumhaus
95111 Rehau

DML00702 EN 08.2022