

## RAUKANTEX-EDGEBAND Technical Delivery Specification: RAU- ABS, PVC, PP, PMMA, PET AND SRT



# CONTENTS

1	Scope	3
2	Area of application	3
3	Dimensions and tolerances	3
4	General material properties	4
4.1	Edgeband materials	4
4.2	Functional layer materials	5
5	Special notes for RAUKANTEX edgebands	5
5.1	ABS edgebands	5
5.2	Transparent PET and PMMA edgebands	5
5.3	Edgebands with protective film	5
5.4	RAUKANTEX pro and plus PVC	5
6	RAUKANTEX classification	5
6.1	RAUKANTEX pure (adhesion promoter edgebands)	5
6.2	RAUKANTEX plus/pro (invisible joint edgeband)	5
6.3	RAUKANTEX edgeband range	5
6.3.1	RAUKANTEX color and dekor	5
6.3.2	RAUKANTEX designo	6
6.3.3	RAUKANTEX magic 1	6
6.3.4	RAUKANTEX magic 2	6
6.3.5	RAUKANTEX magic 3	6
6.3.6	RAUKANTEX soft	6
6.3.7	RAUKANTEX basic edge	6
6.3.8	RAUKANTEX prime edge (translucent design)	6
6.3.9	RAUKANTEX floor	6
7	Processing instructions	6
8	Surface finish	6
9	Storage	6
10	Make-up for delivery and packaging	7
11	Eurotion	7
	runcuuli	/
12	Modifications	7
13	Conformity with standards	7

## 1 SCOPE

This Technical Delivery Specification is essence of contract and applies to RAUKANTEX edgebands.

It defines and limits the range of REHAU's services.

The material and product characteristics relate to the product as it is supplied. This condition has been documented by means of appropriate retain samples.

## 2 AREA OF APPLICATION

RAUKANTEX edgebands are used to cover the cut edges of chipboards in the furniture industry.

#### **RAUKANTEX** pure

Edgebands with universal adhesion promoter for all glue systems available in the market.

#### **RAUKANTEX** plus

Edgebands with an adhesive-based functional layer The glue properties can be compared to traditional bonding in terms of post processing.

#### **RAUKANTEX** pro

Edgebands with functional polymer layer meeting the highest standards.

#### 3 DIMENSIONS AND TOLERANCES

Standard tolerances see tolerance sheet (depending on material).

## 4 GENERAL MATERIAL PROPERTIES

## 4.1 Edgeband materials

	RAU-PP color, dekor and natura	RAU-PP designo	RAU-ABS color, dekor and natura	RAU-ABS basic edge	RAU-PMMA color, dekor
Hardness Shore D DIN EN ISO 7619-1	75 ± 3	$75 \pm 3$	$70 \pm 4$		80 ± 3
Vicat softening temperature ISO 306, method B/50	> 100 °C	> 100 °C	approx. 90 °C		>80 °C
Density according to DIN EN ISO 1183				approx. 0,6 g/cm <sup>3</sup>	
Ball indentation hardness DIN EN ISO 2039, part 1					$\geq 80 \text{ N/mm}^2$
Light fastness Following EN ISO 4892-2 method B Assessment according to grey scale ISO 105-A02	≥ grade 6	$\geq$ grade 6	$\geq$ grade 6		$\geq$ grade 6
Reshrinkage 3 mm edge 1 h at 110 °C in hot cabinet, unrestrained	≤ 0,2 %	≤ 0,2 %			
Reshrinkage $\ge$ 1.7 mm edgeband 1 h at 90 °C in hot cabinet, unrestrained			≤ 1,7 %	≤ 0,3 %	$\leq$ 1,0 % for edgeband $\geq$ 1,3 mm
Reshrinkage $\leq$ 1.5 mm edgeband 1 h at 60 °C in hot cabinet			≤ 0,3 %		
Water vapor resistance following EN 438-2 item 14		level 5			

	RAU-PVC color, dekor and natura	RAU-PVC soft	RAU-PVC 1195 floor	RAU-PVC 1293 floor	RAU-PVC 1699 floor	RAU-PET magic 1	RAU-PP/SRT soft
Hardness Shore D or A DIN EN ISO 7619-1	$79 \pm 4$ (D)	59 to 75 (A) as specified in formulation			75 ± 4 (D)		70 to 90 (A) as specified in formulation
Vicat softening temperature ISO 306, method B/50	> 72 °C		approx. 73 °C	approx. 75 °C	approx. 65 °C	approx. 76 °C with aluminium insert	
Tensile strength DIN EN ISO 527-2			$\geq 30 \text{ N/mm}^2$				
Elongation at break DIN EN ISO 527-2			0-5%				
Surface resistance Measurement with special electrode at 10 V			$5x10^4 < R < 5x10^6$ Ohm	<5x10 <sup>11</sup> Ohm			
Volume resistance: (for 0.8 mm edgeband thickness) 100 mm edgeband on sheet metal support Mount Ø 50 mm brass electrode, at 10 V			5x10 <sup>4</sup> < R < 5x10 <sup>6</sup> Ohm				
Light fastness Following EN ISO 4892-2 method B Assessment according to grey scale ISO 105-A02	≥grade 6	≥grade 6		≥grade 6		≥ grade 6	$\geq$ grade 6
Reshrinkage $\ge$ 1.7 mm edgeband 1 h at 90 °C in hot cabinet	$\leq 1,7$ %					< 0,3 %	
Reshrinkage $\leq$ 1.5 mm edgeband 1 h at 60 °C in hot cabinet	$\leq 0,3$ %		$\leq 0,3$ %	< 0,3 %	$\leq 0,3~\%$	< 0,1 %	
Behaviour in fire DIN 4102 sheet #4	self- extinguishing	self- extinguishing	self- extinguishing	self- extinguishing	extinguishes after the acting flame has been withdrawn		

#### 4.2 Functional layer materials

	RAU-KANTEX pro	RAU-KANTEX plus
Hardness Shore D or A DIN EN ISO 7619-1	$58 \pm 3$ (D)	approx. 87 (A) $\approx$ approx. 12 (D)
Melting point (DSC) DIN EN ISO 11 357-1 (beating rate 10 K/min)	150 ± 15 °C	approx. 54 °C
Density according to ISO 1183	0.85-0.93 g/cm <sup>3</sup>	approx. 0.9 g/cm <sup>3</sup>
Tensile strength to ISO 527	> 14 Mpa	approx. 2.9 Mpa
Light fastness Following EN ISO 4892-2 method B Assessment according to grey scale ISO 105-A02	≥ grade 6	grade 6 is not achieved

#### 5 SPECIAL NOTES FOR RAUKANTEX EDGEBANDS

#### 5.1 ABS edgebands

It is recommended to clean edgebands made from RAU-ABS with special plastic cleaners.

Substances with a high solvent or alcohol content should not be used for cleaning as this might cause the edgeband material to become brittle or dissolve it.

If strong pressure is applied while rubbing, intensive or dark colors may come off at the routed radius. For further information on processing and cleaning, please refer to the corresponding sales documentation.

#### 5.2 Transparent PET and PMMA edgebands

When using release or cleaning agents check carefully that they are without alcohol and solvents as these must not come into contact with transparent edgeband materials.

This applies especially to antistatic agents and/or coolants.

Cracks may form if agents containing alcohol or solvents are used, even after a certain time.

For further information please refer to the corresponding sales documentation.

#### Tips on cleaning and how to reduce stress cracking:

Basically all transparent rigid plastics are susceptible to stress cracking if they are overexpanded and cleaned with aggressive cleaning agents. Stress cracking can appear as deep cracks in the material, small hairline cracks or as milky clouding of the transparent material, depending on the degree of overexpansion. This is why it is crucial that the edgeband be placed around the outer radius of the board without any tension. This can be done by heating the edgeband material sufficiently with IR heaters or hot air.

#### 5.3 Edgebands with protective film

The print on the protective film of edgebands is resistant to solvents only to a limited extent.

The protective film must be removed from the edgeband directly after final assembly.

The standard protective film (transparent print) is not UV resistant (e.g. for painting). We recommend our UV-resistant black and white protective film for such special applications.

#### 5.4 RAUKANTEX pro and plus PVC

RAUKANTEX pro or plus PVC can be processed using the hot air method.



The laser technology is not approved for processing RAUKANTEX pro or plus PVC as harmful gases may

#### 6 RAUKANTEX CLASSIFICATION

#### 6.1 RAUKANTEX pure (adhesion promoter edgebands)

RAUKANTEX pure edgebands are designed for processing on customary edgebanding machines using the hot-melt adhesive process. For this purpose, the edgebands are coated on the back with a universal primer suitable for use with hot-melt adhesives. The suitability of the adhesives used shall be determined by the customer by means of processing trials. The processing instructions of the adhesive supplier shall be observed.

#### 6.2 RAUKANTEX plus/pro (invisible joint edgeband)

RAUKANTEX plus/pro invisible joint edgebands are designed for processing with edgebanding machines using the  $CO_2$  or diode laser, hot air or NIR method. For this purpose the edgebands have been equipped with a functional bottom layer. The suitability of the RAUKANTEX invisible joint edgebands shall be determined by the customer by means of processing trials.

REHAU recommends to use an exhaust when processing the edgeband as melting the functional layer materials can cause harmful substances to form. The exhaust air can be released into the environment if the technical instruction on air quality control is complied with - check the local regulations for each case. If purified air is returned, dust particles and gaseous components must be filtered in compliance with the machine and filter manufacturer's specifications.

#### 6.3 RAUKANTEX edgeband range

#### 6.3.1 RAUKANTEX color and dekor

RAUKANTEX color and dekor edgebands are intended for use with furniture components without special water vapor resistance requirements.

#### 6.3.2 RAUKANTEX designo

RAUKANTEX designo edgebands made of RAU-PP are intended for use with furniture components with special water vapor resistance requirements.

#### 6.3.3 RAUKANTEX magic 1

RAUKANTEX magic 1 edgebands made of RAU-PET with aluminium insert are characterized by a realistic metal effect.

#### 6.3.4 RAUKANTEX magic 2

RAUKANTEX edgebands with an aluminium or stainless steel surface. The aluminium or stainless steel surface is protected by UV coating and protective film.

#### 6.3.5 RAUKANTEX magic 3

RAUKANTEX edgebands made of RAU-PP have a polymer aluminium or chromium surface and a protective film. They are intended for use with furniture components without special water vapor resistance requirements.

#### 6.3.6 RAUKANTEX soft

RAUKANTEX soft edgebands with a seal / buffer element are intended for use as a dust seal or compression seal.

#### 6.3.7 RAUKANTEX basic edge

RAUKANTEX basic edge made of foamed RAU-ABS is used as a supporting edgeband in lightweight boards or as a bottom edge of low-density chipboards for thin edge fabrication. Its surface has a light structure and is basically homogeneous.

#### 6.3.8 RAUKANTEX prime edge (translucent design)

RAUKANTEX prime edges made of RAU-ABS must be coated with opaque paint as their light fastness is limited.

PUR paints (Desmodur/Desmophen paints) are particularly suited for this purpose. Any paint systems shall be agreed with the manufacturer and their suitability shall be confirmed by means of processing trials. There are no particular edgeband surface requirements in terms of color, homogeneity or gloss.

Store the edgebands away from light.

#### 6.3.9 RAUKANTEX floor

RAUKANTEX edgebands made of electrically conductive RAU-PVC 1195 (thickness  $\geq 0.5$  mm) with adhesion promoter are self-extinguishing and are used to discharge static electricity on raised floor elements.

Please note that, due to the ingredients used, color may come off if it is not handled correctly.

The formulation of RAUKANTEX edgebands made of RAU-PVC 1699 with adhesion promoter reduces creaking noises and makes them self-extinguishing. These edgebands are used to cover the cut edges of raised floor elements.

RAUKANTEX edgebands made of RAU-PVC 1293 with adhesion promoter have a defined brittleness and are self-extinguishing. They are used to cover the cut edges of raised floor elements made of mineral material.

In case it is printed with lettering, the latter has only a limited resistance to abrasion and solvents.

#### 7 PROCESSING INSTRUCTIONS

The processing parameters depend, in particular, on the glues and additives used, the environmental conditions and the machines and tools used. The customer shall ensure edgeband adhesion after fabrication using suitable methods and tests.

The edgebands to be processed shall be conditioned at normal room temperature (approx. 18 °C). It is recommended to open the packaging.

You will find more processing instructions in the sales literature and in the Technical Information.

#### 8 SURFACE FINISH

Surface specification according to REHAU embossing and gloss level collection.

Process or material related variations must not have a disturbing effect if viewed from a distance of 0.5 m.

#### 9 STORAGE

If stored properly, RAUKANTEX edgebands can be stored for min. 12 months.

For edgebands older than 12 months, however, a processing trial should always be carried out prior to series processing. Recommended storage conditions:

- Room temperature (approx. 18 °C to 25 °C)
- Dry
- Clean
- No solvent vapors
- Away from light

RAUKANTEX soft PVC shall not be stored longer than 6 months after delivery.

RAUKANTEX plus (with hot melt adhesive coat on the back) shall not be stored longer than 6 months after delivery. The storage temperature must not exceed 25 °C to prevent the winding layers from sticking together.

### 10 MAKE-UP FOR DELIVERY AND PACKAGING

As specified in the order.

#### 11 FUNCTION

The customer has determined suitability of our product for the specific application by way of appropriate functional tests.

#### 12 MODIFICATIONS

As the responsible supplier, REHAU reserves the right to carry out modifications or deviations of the products under contract, for purposes of improvement and further development. The latest edition of the Technical Delivery Specifications applies.

#### 13 CONFORMITY WITH STANDARDS

Changes of requirements due to modifications of the standards indicated in this Technical Delivery Specification have to be advised and ordered by the customer. Unless a different agreement exists, the standard editions valid at the time of issue of the TDS shall apply.

This document is protected by copyright. All rights based on this are reserved. No part of this publication may be translated, reproduced or transmitted in any form or by any similar means, electronic or mechanical, photocopying, recording or otherwise, or stored in a data retrieval system. Insofar as the intended application deviates from that described in the relevant Technical Information brochure, the user must consult REHAU and must receive express written consent from REHAU before commencing this utilization. If the user fails to do so, the sole responsibility for the utilization shall lie with the individual user. In this case, the application, use and processing of products are beyond our control. Should a case of liability arise, however, this shall be limited to the value of the goods delivered by us and used by you in all cases of amage. Claims arising from granted guarantees shall become invalid in the case of intended applications that are not described in the Technical Information brochures.

#### REHAU SALES OFFICES

AT: Linz, +43 732 3816100, linz@rehau.com Wien, +43 2236 24684, wien@rehau.com Graz, +43 361 403049, graz@rehau.com BA: Sarajevo, +387 33 475500, sarajevo@rehau.com BE: Bruxelles, +32 16 399911, bruxelles@rehau.com BG: Sofia, +359 2 8920471, sofia@rehau.com FX Minsk, +375 17 2450209, minsk@rehau.com CH: Bern, +41 31 720120, bern@ rehau.com Wey, +41 21 9482636, vevg@rehau.com zurich, +141 44 8397979, zurich@rehau.com FX Praha, +420 227 190111, pnaha@rehau.com BE: Berlin, +49 30 667660, berlin@rehau.com Bielefeld, +49 521 208400, bielefeld@rehau.com Bochum, +49 234 689030, bochum@rehau.com Fraha, +420 272 190111, pnaha@rehau.com Harburg, +49 40 733402100, hamburg@rehau.com Leizig, +49 34292 820, leizig@rehau.com Minchen, +49 8102 860, muenchen@rehau.com Nimberg, +49 9131 934080, nuernberg@rehau.com Stuttgart, +49 7159 16010, stuttgart@rehau.com DK: Kobenhavn, +45 46 773700, kobenhavn@rehau.com EE: Tallinn, +372 6025850, tallinn@rehau.com ES: Barcelona, +34 93 6353500, barcelona@rehau.com Bile.p, +34 94 4536636, billea@rehau.com Minchen, +49 8102, maid@rehau.com FI: Helsink, +358 9 87709900, helsinki@rehau.com FR: Lyon, +33 4 72026300, lyon@rehau.com Metz, +33 6 6500, met@rehau.com FR: syn, +33 1 34836450, paris@rehau.com FI: Helsink, +358 9 87709900, helsinki@rehau.com FR: Athens, +30 21 06682500, athens@rehau.com TR: syn, +33 1 49336450, paris@rehau.com FI: Zagreb, +385 1 3444711, zagreb@rehau.com HI: Budapest, +38 2 530700, budapest@rehau.com II: Vinius, +370 5 246100, vilnius@rehau.com HI: Zagreb, +385 1 3444711, zagreb@rehau.com HI: Budapest, +38 2 530700, budapest@rehau.com II: Vinius, +370 5 24514150, celo@rehau.com HI: Kagreb., +385 1 716 7409000, resister@rehau.com NU: Njka, +43 22 2056300, varszava@ rehau.com Jekalerihurg, -1734 253310, vilnius, +370 5 2451410, vilnius@rehau.com HI: Riga, +31 16 705000, soligi@rehau.com NU: Njka, +43 22 2056300, varszava@ rehau.com Jekalerihurg, -1734 253310, jekalerihurug@rehau.com Riter, 433 27755100, katorvice@rehau.com NU: Njkar, +13 22 2056300, varszava@ rehau.com J

© REHAU AG + Co Rheniumhaus 95111 Rehau www.rehau.de

Subject to technical changes DML00513 EN 05/2016