



# RAUVISIO CRYSTAL SLIM TECHNICAL DATA SHEET

Construction Automotive Industry

# RAUVISIO CRYSTAL SLIM TECHNICAL DATA SHEET

RAUVISIO crystal combines a high-quality real glass appearance with the positive properties of a polymer material and therefore offers maximum flexibility as part of the production process for splash back solutions but also as an infill panel for fronts.

The co-extruded, polymer surface consists of several layers:

## 2.0 mm: Transparent, scratch-resistant layer

### 3.0 mm: Pigmented, coloured layer

RAUVISIO crystal is designed for vertical applications indoors. The thermal coefficient of linear expansion is to be taken into account for use as an infill panel.

The scratch-resistant, coated PMMA surface of the glass laminate is protected by a special PE foil that should not be removed until after assembly.

### Product advantages:

- Light-weight and therefore advantageous for transport, packaging and assembly
- Break-proof
- Maximum flexibility during processing (individual pre-cut, flexible drill holes, different shapes etc)
- Hygienic and insensitive during day-to-day use (scratch-proof coating, can be written on with water-soluble board marker, lotus effect, easy to clean with water and microfibre cloth

### Technical data at a glance:

Product data	Test standard	Technical data	Tolerance / Limit value
System component thickness	as per technical drawing based on DIN 438-2	5 mm	± 0.2 mm
System component width	as per technical drawing based on DIN 438-2	1300 mm	± 1.5 mm
System component length	as per technical drawing based on DIN 438-2	2800 mm	± 5 mm
Angle deviation	as per technical drawing based on DIN 438-2	90 °	± 5 °
Edge defects	as per technical drawing based on DIN 438-2	15 mm	
Weight per square metre	-	~ 5.8 kg/m <sup>2</sup>	

Material properties	Test standard	Technical data
Apparent density glass laminate	DIN EN 323	1.17 kg/dm <sup>3</sup>
Fire behaviour	DIN 4102/1	B 2
Material purity / Sand content	Residue on ignition	≤1 %
Hardness Shore D	DIN ISO 7619-1	91 ± 3
Vicat softening temperature	DIN EN ISO 306 – art. B50	≥ 99 °C
Light fastness	based on DIN EN ISO 4892-2, art. B (behind window glass) Assessment to DIN EN ISO 105 A02	≥ Level 7

Glass laminate RAUVISIO crysta Surface and colours within tight to		ation – defined tolerance limits are colour shade-specific and are to l	be agreed with the customer
Visual properties	Test standard	Requirement	Test result
Gloss level of the surface	AMK-MB-009, 09/2010	Measurement with 60° measurement geometry	$\geq$ 85 gloss level points (GLE) high gloss
Colour	AMK-MB-009, 09/2010	No significant change to the limit sample; even covering properties	Fulfilled
Surface	AMK-MB-009, 09/2010	Even surface, surface defects when viewed from 0.7 m distance must not be visible. A surface that is completely free from defects cannot be achieved due to the industrial manufacturing process, small defects and inconsistencies on the surface are permitted.	Fulfilled

Surface properties - mechanical / physical	Test standard	Requirement	Test result
Chemical resistance <sup>2)</sup>	DIN 68861 / T1	1 A	see table below
Scratch resistance	DIN 68861 / T4	4C	1.5 N tested
Micro-scratch resistance	IHD-W-466 (Art. A)	Class 1	Fulfilled
Behaviour in dry heat	68861 / T7 / DIN EN 12722 DIN CEN TS 16209	7D Class C	70 °C 100 °C
Behaviour in moist heat	DIN 68861 / T8 / DIN EN 12721	8B	70 °C
Cross cut test	DIN EN ISO 2409	GT 0-1	Fulfilled
Behaviour in water vapour	DIN 438-2	Level 5 no changes	Fulfilled
Flexural modulus of elasticity	DIN EN ISO 178		3080 N/mm <sup>2</sup>
Flexural strength	DIN EN ISO 178		98 N/mm <sup>2</sup>
Impact strength	DIN EN ISO 179-1		11 kJ/m <sup>2</sup>
Thermal coefficient of linear expansion per Kelvin temperature change	ISO 11359-2	- 40 °C to 20 °C 10 °C to 40 °C 20 °C to 80 °C	0.590 E <sup>-4</sup> 0.667 E <sup>-4</sup> 0.754 E <sup>-4</sup>

<sup>2)</sup> The testing of the chemical resistance to DIN 68861-1 includes the following substances, other substances have not been tested specifically and are to be tested by the customer separately. Test results apply exclusively for the lacquered board surface and not for mechanically exposed radii or milling in the milled area.

5

4

3

**Chemical resistance** 

Substances	Result
Acetic acid:	Result 5
Citric acid:	Result 5
Sodium carbonate:	Result 5
Ammonia water:	Result 5
Ethyl alcohol:	Result 5
White wine, red wine, fortified wine	Result 5
Beer:	Result 5
Cola:	Result 5
Instant coffee:	Result 5
Black tea:	Result 5
Blackcurrant juice:	Result 5
Evaporated milk:	Result 5
Water:	Result 5
Petrol:	Result 5
Acetone:	Result 5
Ethyl-butylacetate:	Result 5
Butter:	Result 5
Olive oil:	Result 5
Mustard:	Result 5
Cooking salt:	Result 5
Onion juice:	Result 5
Disinfectants:	Result 5
Black ball pen-paste ink:	Result 5
Stamping ink:	Result 5
Cleaning agent:	Result 5
Cleaning solution:	Result 5

		of the test surface has 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 has changed
_	0	Test surface severely changed or destroyed
_		

Result

No visible change

Just noticeable change in gloss or colour

Slight change in gloss or colour; the structure

In addition to this, please also observe the technical information of document F20600 "Technical information RAUVISIO crystal" without fail in particular in relation to transport, packaging, storage, processing, assembly, use and care. You can obtain the current version of the documents from your REHAU sales office or you can download it at www.rehau.com.

Note: Please also inform your customers of the need to follow the current technical information and make this available to your customers.

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, ele,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." auf Seite 4ctronic or mechanical, photocopying, recording or otherwise, or stored in a data retrieval system. Our verbal and written advice relating to technical applications is based on experience and is to the best of our knowledge correct but is given without obligation. The use of REHAU products in conditions that are beyond our control or for applications other than those specified relaeses us from any obligation in regard to claims made in respect of the products. We recommend that the suitability of any REHAU product for the intended appli, Our verbal and written advice relating to technical applications is based on experience and is to the best of our knowledge correct but is given without obligation. The use of REHAU products in conditions that are beyond our control or for applications other than those specified releases us from any obligation in regard to claims made in respect of the products. We recommend that the suitability of any REHAU products for the intended application should be checked. Utilization and processing of our products are beyond our control and are therefore exclusively your responsibility. In the event that a liability is nevertheless considered, any compensation will be limited to the value of the goods supplied by us and used by you. Our warranty assumes consistent quality of our products in accordance with our specification and in accordance with our general conditions of sale." auf Seite Tcation should be checked. Utilization and processing of our products are beyond our control and are therefore exclusively your responsibility. In the event that a liability is nevertheless consistent quality of our products in accordance with our general conditions of sale." auf Seite Tcation should be checked. Utilization and processing of our products are beyond our control and are therefore exclusively your responsibility. In the event that a liability is nevertheless consistent quality of our products in accordance with our specification and in accordance with our general conditions of sale.

#### REHAU SALES OFFICES

AE: Middle East. +971 4 8836677, dubal@rehau.com Aires. +54 11 48986000, buerosales@rehau.com Aire. +43 732 3816100, linz@rehau.com Wien, +43 226 24684, vien@rehau.com Grz. +43 681 403044, graz@rehau.com Aires. A