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### **ENERGY EFFICIENCY IN PERFECTION**

ONLY THE BEST FOR THE FUTURE — THE NEW GENEO® WINDOW SYSTEM MADE FROM HIGH-TECH MATERIAL RAU-FIPRO®

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### GENEO® WINDOW PROFILE SYSTEM

# BEST IN CLASS ON THE MARKET! GENEO® IS MORE FUTURE-ORIENTED — TO HELP YOU MAKE THE RIGHT DECISION



Thanks to their technological advances and their performance characteristics, windows constructed from GENEO® profiles put all previous window systems in the shade.

- The first fully reinforced window profile system
- Constructed from the high-tech material RAU-FIPRO®
- The most energy-efficient profile for windows ranging from low energy houses (e.g.,  $U_w = 1.1 \text{ W/m}^2\text{K}$ ) to passive solar house standards (e.g.,  $U_w = 0.73 \text{ W/m}^2\text{K}$ ).
- The best possible level of sound insulation without steel reinforcement, achieving previously unattainable values (glass 50 dB =  $R_{\text{w,P}}$  47 dB) for sound insulation class 5 and including optimal thermal insulation.
- Break-in protection up to resistance class 3. Without steel reinforcement, resistance class 2 including optimal thermal insulation
- High levels of investment security by meeting current and foreseeable EnEV standards<sup>1)</sup>, thus ensuring long-term value for your property.

Save your energy! There is no better way to change your energy budget to meet future needs.

#### GENEO® MD plus, Passive solar house standard

$$\begin{split} & U_g \text{ value} = 0.5 \text{ W/m}^2\text{K} \\ & U_f \text{ value} = 0.91 \text{ W/m}^2\text{K} \\ & U_w \text{ value} = 0.73 \text{ W/m}^2\text{K} \end{split}$$

Calculated savings \*\*
Annual savings using GENEO®

Crude oil: 1,341 liters Euros: 1,006.00 Euros CO<sub>2</sub> reduction: 3,621 kg

MD plus:

#### GENEO® MD plus, Suitable for passive solar houses

 $U_g$  value = 0.6 W/m²K  $U_f$  value = 0.91 W/m²K  $U_w$  value = 0.80 W/m²K \*

Calculated savings \*\*

### Annual savings using GENEO® MD plus:

Crude oil: 1,299 liters Euros: 974 Euros CO<sub>2</sub> reduction: 3,507 kg

## GENEO® MD plus, surpasses the latest EnEV regulations <sup>1)</sup>

 $U_g$  value = 1.0 W/m<sup>2</sup>K  $U_f$  value = 0.1 W/m<sup>2</sup>K  $U_w$  value = 1.1 W/m<sup>2</sup>K \*

Calculated savings \*\*

### Annual savings using GENEO® MD plus:

Crude oil: 1,136 Liters Euros: 852 Euros CO<sub>2</sub> reduction: 3,067 kg GENEO® profiles allow the most energy-efficient windows in their class to be created. They create the comfortable environment you have always wanted.

The fully reinforced profile design requires no steel, thus eliminating thermal bridges through which valuable energy can be lost. The best possible break-in protection and previously unattained sound insulation are included.

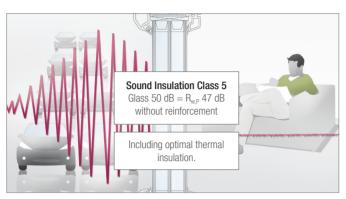
<sup>1)</sup> Energy saving regulations from the construction ministry.

<sup>\*</sup> Window size: 1230 × 1480 mm.

<sup>\*\*</sup> Based on: timber/plastic windows from the 1970s with an approximate U<sub>w</sub> value of 3.0 W/m<sup>2</sup>K and a total window area of 52 m<sup>2</sup>. Heating method: crude oil (current price: 75 cents/liter).

### WINDOWS MADE OF GENEO® PROFILES

### SOUND INSULATION AND BREAK-IN PROTECTION - INCLUDING HIGH-TECH





#### Center seal

With its three surrounding seal levels, the GENEO® window profile offers the best possible insulation characteristics. The highly elastic seal material which is resistant to continuous stress guarantees a long service life.

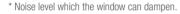
Sound insulation: Enjoy the relaxing quiet.

Sound insulation class	Traffic density	Distance between the home and the center of the street	Recommended window sound insulation value*	Glass	R <sub>w,P</sub>
1	Residential street, 1,500 vehicles/day	3-12 m	28-29 dB		
2	Residential street, 1,500 vehicles/day	12-5 m	30-34 dB		
3	Federal highway, 30,000 vehicles/day	150-80 m	35-39 dB		
4	Federal highway, 30,000 vehicles/day	80-30 m	40-44 dB	40 dB	42 dB
5	Freeway, 50,000 vehicles/day	70-40 m	45-49 dB	50 dB	47 dB



#### Sleek design

The profile design offers an elegant, sleek appearance (115 mm) for even the largest elements. Combined with REHAU's innovative adhesive technology, even floor-length windows can be created with the necessary degree of stability.



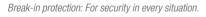




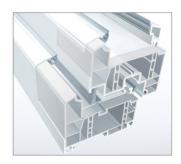
#### Optimized thermal insulation

GENEO® possesses functional chambers which can be employed for a variety of purposes. For example, the GENEO® MD plus uses thermal modules to optimize insulation properties and provide a thermal insulation plus.









#### RAU-FIPRO® profile core

The profile core made from the high-tech material RAU-FIPRO® gives GENEO® window profile systems maximum stability.





### **GENEO® PROFILE SYSTEMS**

# FOR WINDOWS WITH A FUTURE RAU-FIPRO® — THE INNOVATIVE, HIGH-TECH MATERIAL



#### 1. Unbeatably stable

RAU-FIPRO® — represents high-tech in combination with an innovative material formulation. The highest level of profile core stability sets new benchmarks for window profile systems.

#### 2. Uniquely innovative

With a high-tech fiber composite material, this branch-specific novelty sets an example. After aircraft construction and formula 1 design, fiber composite materials now also offer the best performance in the area of window design.

#### 3. Highest quality

The best initial materials combined with the highest processing benchmarks result in the outstanding quality and long service life of profiles made from RAU-FIPRO®. And this under even the highest stress levels.

#### An overview of all properties:

#### GENEO® window profile systems

delived window promo systems			
Construction width:	86 mm / 6 chamber system		
Thermal insulation:	U <sub>f</sub> up to 0.85 W/m <sup>2</sup> K (MD plus)*		
Sound insulation,	Up to sound insulation class 5**		
sound insulation class (VDI 2719):	(Glass 50 dB = $R_{w,P}$ 47 dB)		
Break-in protection	Up to resistance class 3		
	Up to resistance class 2 (without steel)		
Surface:	High value, smooth, sealed and easy		
	maintenance		
- Ideal for low energy houses and	- Up to the passive solar house standard		
energy conscious renovation	- For upscale home construction		

 $<sup>^*</sup>$   $U_f = Profile thermal insulation value$ 

Compare price and performance and you will choose windows made from  ${\tt GENE0@}$  profiles.

Please get in touch with us. We look forward to your decision.

#### REHAU SALES OFFICES

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<sup>\*\*</sup> Including optimal thermal insulation