



BIONIUM alutechnik
matauschk
The aluminium windowsystem
... for the future

**alutechnik
matauschk**



The Aluminium Window System
Suitable for passive houses and environment-friendly
BIONIUM

“Your house is something special,
give yourselves and your home
the necessary security”

- Our family company exists since 1913 and occupies nowadays 125 employees, 16 of our employees are apprentices and at the moment in an education to become a metal constructional engineer.
- Privately, catering trade or project construction, our references are a proof of quality, delivery loyalty and permanence.
- A 100% Austrian product
- Every order is worked on personalized
- The profile surfaces are powder-coated
- There are no borders concerning the colour choice
- Our especially own developed aluminum profiles are very stable and free of delay.
- Excellent by the Styrian government with the coat of arms and the honorary coat of arms of the town Kapfenberg.

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THE **BIONIUM** WINDOW

The word "**BIONIUM**" sits down from two words "**BIONICS**" and "**ALUMINUM**"

Company Alutechnik Matauschek has intensely tried during the last five years to develop an aluminum window for the passive building of a house (UW value <1.0).

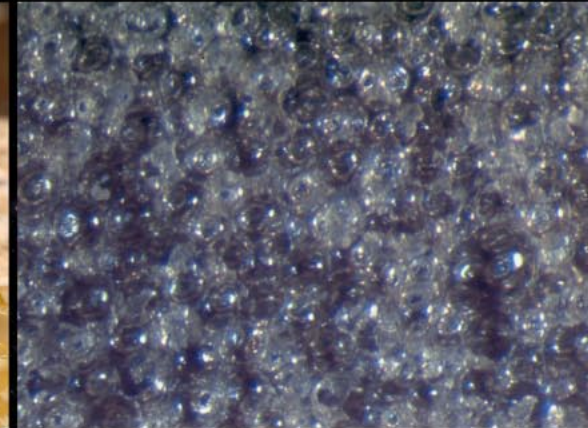
Countless attempts were carried out, but did not bring the desired success.

A coincidentally conversation with a friendly beekeeper

and the combination of the private interest in polar bear led us to the bionics.



WHY WE SHOULD INVENT SOMETHING NEW, WHAT FUNCTIONED SINCE THOUSANDS OF YEARS IN PERFECT TENSE?



The fur hair of the polar bear is hollow and filled with air. This brilliant construction of nature enables the polar bear to get over also deepest temperatures, his fur is perfectly in isolation.

The bees, brilliant master builders of nature, develop perfect static constructions with her honeycomb technology.

The combination of these both physical developments proved for us a perfect insulating area in the window, the result is a frame U-Value UF from 0.9 W / m²K for us.

On a modern triple glazing with, for example, an U-Value of 0.5 W / m²K, can be calculated for the whole window with an U-Value UW = 0.7 W / m²K.

BIONIUM IS WORLDWIDE BY FAR THE BEST ALUMINIUM WINDOW!

And the price is not higher than the price of a normal customary aluminium window.

The Aluminium Window System **BIONIUM**

Technical data **CE** certificates
checked: university of Graz Lab for construction physics
Test size: 2400 x 2400 mm double-winged

Air permeability

Classification 4

15 minutes with 1600 Pa correspond 180 km/h of wind load

Blow rain density

Classification 9A

15 min with 1040 lt/h water curtain without wind pressure every 5 min rising about 50 Pa after 60 min test duration concluded with 600 Pa (110 km/h)

Robustness against wind load

Classification B4

Deflection = $l / 200$, test pressure 1600 Pa

Sound insulation

Rw-Values in accordance with different glass superstructures

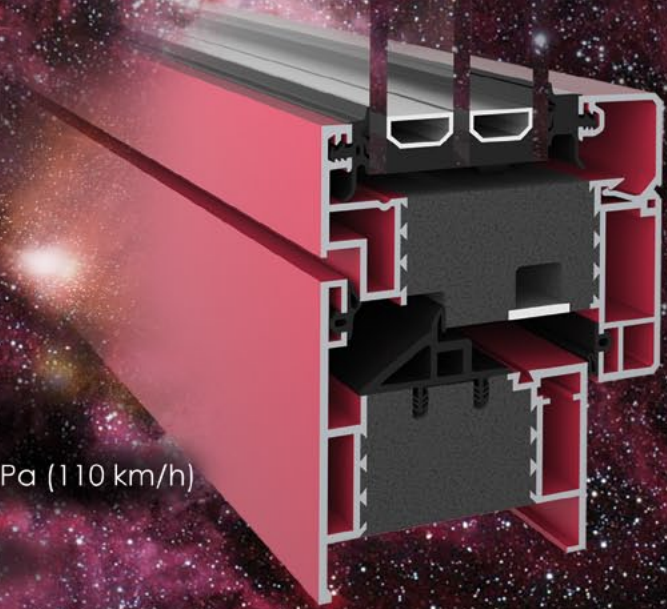
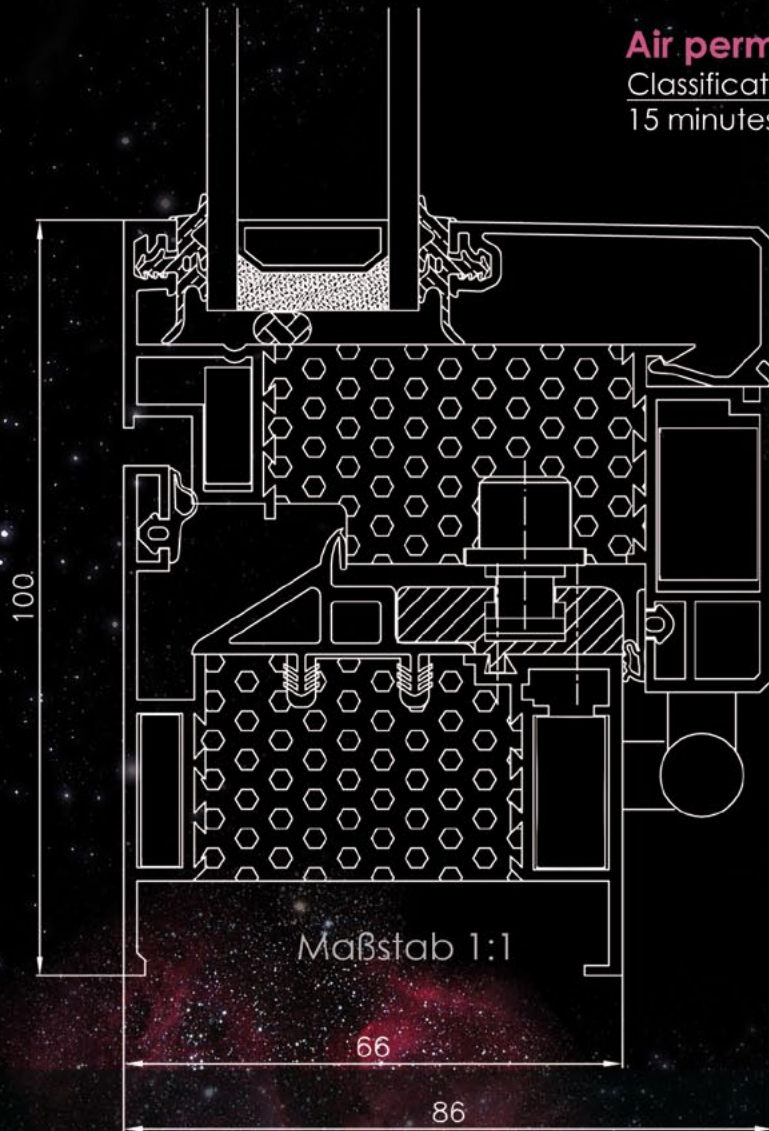
4/16/4	-	32 db
6/16/4	-	37db
8/16/4	-	38db
10/16/4	-	39db
8/16/4/16/4	-	39db
10/16/9wsg	-	44db

Long-term function test

15000 rotary tilting openings
10000 rotary cycles with surcharge function.

U-Value $U_f = 0,9 \text{ W/m}^2 \text{ K}$ checked

do prove with glazing $U_g = 0.5 \text{ W/m}^2 \text{ K}$ calculates $U_w = 0.7 \text{ W/m}^2 \text{ K}$



1. **The slash lifter**
controls the wing imperceptible,
supports and fixes,
a lasting function is thereby protected



2. **The security roller** cam in mushroom head
form raises the security and
is adjustable in the contact pressure



2a. Annulling is prevented in connection
with **mushroom head** (2)
by the security frame part

3. **The corner camp**
is three-dimensional adjustable



4. **The scissors tape** bolts /contact pressure
adjustably

5. **Clutch** if requested obstructable

6. **Glazing** -
from two-l-triple glazing

7. **Powder-coated surface**
in new color compositions



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On more than **10,000 ms²** production surface are completely made by certified skilled workers with modern, computer-controlled machines, our conservatories and windows. You can find some Photos of realized projects on our homepage.

Visit us... You're welcome!!

With pleasure we organize a guidance all around our office building or our company site.
(For untimely registration it would be asked friendly)

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Opening times: : Mo - Do 8 -16 h Fr 8 -12:30 h

ALUTECHNIK MATAUSCHEK

Werk-VI Strasse 28, 8605 Kapfenberg EUROPE/Austria

Tel: +43 (0) 3862 22 22 3 Fax:+43 (0) 3862 22 22 3-23

Mail: alu@matauschek.com

Homepage: www.matauschek.com



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Some other products of our company are:

Conservatories	Full-Glass-Lifting/Sliding-Doors
Fire prevention window	Front doors, preroots
Facades	Attic removals

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