CAN IT DO THAT MUCH MORE?

KÖMMERLING 76 – Double seal system.
The Discoverer‘s Window.

koffman
windows & flooring

Company founder Karl Kömmerling

AREN'T ALL WINDOWS THE SAME?

KÖMMERLING. The premium brand.

At first glance, windows and window profiles look very similar. However, on close inspection, for example when you're considering buying a new window, you'll notice that their quality characteristics can differ considerably!

Window systems manufacturer KÖMMERLING enjoys an excellent reputation for its high quality products and advanced technologies. The company was founded back in 1897 by Karl Kömmerling.

In the first years of its long history, the KÖMMERLING Company manufactured adhesives and synthetic rubber. In 1957 it commenced PVC-U roller shutter manufacturing operations and in 1967 it entered the window market by starting to produce high quality PVC-U window profiles.

Decades of know-how were incorporated in the window system production operations and KÖMMERLING soon evolved into a leading systems supplier. The latest system generation - KÖMMERLING 76 - sets unique standards. It incorporates our comprehensive expertise, decades of research and development work, state-of-the-art computer-aided design and simulations and countless tests. The KÖMMERLING 76 reflects our commitment to offering best-in-breed window systems to our customers.

since 1897

WHY DOES LIGHT MAKE US HAPPY?

KÖMMERLING 76. The feel-good window.

Light is essential to human survival. It makes us feel happy and enhances our sense of general well-being. That's why a well-lit and inviting interior is an important aspect of an ideal living environment. KÖMMERLING 76 helps you to fulfil your dream of a light-flooded living environment with a pleasant atmosphere.

Innovative profile technology makes it possible to manufacture windows with larger panes and enhanced static stability from state-of-the-art functional glass. It makes optimum use of sunlight incidence to reduce heating costs, even when the outdoor temperature is cold.

Look forward to KÖMMERLING 76. These windows maximise interior sunlight levels and ensure that your new or renovated home will light up your life.

- **Intelligent profile design foroptimised window stability.**
- **Narrow profiles maximise light incidence.**
- **Higher solar energy gains additionally reduce heating costs.**

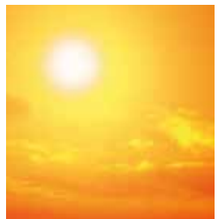
- **With standard windows, the high insulation double seal system with 76 mm construction depth already achieves a U_f value of 1.1 W/(m²K).**
- **Comprehensive range of glazing up to 50 mm for use in modern triple glazing or modern functional glass designs.**
- **Use of solar energy gains.**

HOW DOES THAT WORK? HEAT CAN GET IN BUT NOT OUT

KÖMMERLING 76. The energy-saving window.

Saving energy makes sense. It puts extra money in your pocket and is good for the environment. Ideally, energy saving should be simple, fun and convenient.

KÖMMERLING 76 is a brand new generation of PVC-U windows that tick all the boxes. Not only do they automatically save energy, they also have perfectly elegant aesthetics.



Three aspects play an important role in window heat insulation: the profile's heat insulating properties, the insulating glass with edge sealant and the wall connections. In combination with an aluminium static profile (AluClip Pro), KÖMMERLING 76 can be installed without any steel reinforcement in the sash or frame.

The reinforcement chamber is foam-filled to improve the heat insulating effect. This innovative technology is called ProEnergyTec.

KÖMMERLING 76 can also integrate modern triple glazing or special functional glass in thicknesses of up to 50 mm. This prevents the loss of valuable heating energy, plus the large window panes allow the sun's warmth into the room. This is energy saving at its most simple and aesthetic.

WHAT DO YOU NEED FOR A QUIET AND SAFE HOME?

KÖMMERLING 76. The soundproof window.

How about considering new windows from the perspective of noise? This aspect is often neglected in window purchase decisions. Yet sound insulation is essential to your family's health because subjectively annoying noises are a permanent source of stress that can trigger a range of health problems.

KÖMMERLING 76 protects you and your family from noise pollution. Its innovative profile sealing technology in conjunction with sound-insulating glazing ensures a peaceful and quiet living environment - even when you live close to a busy road.

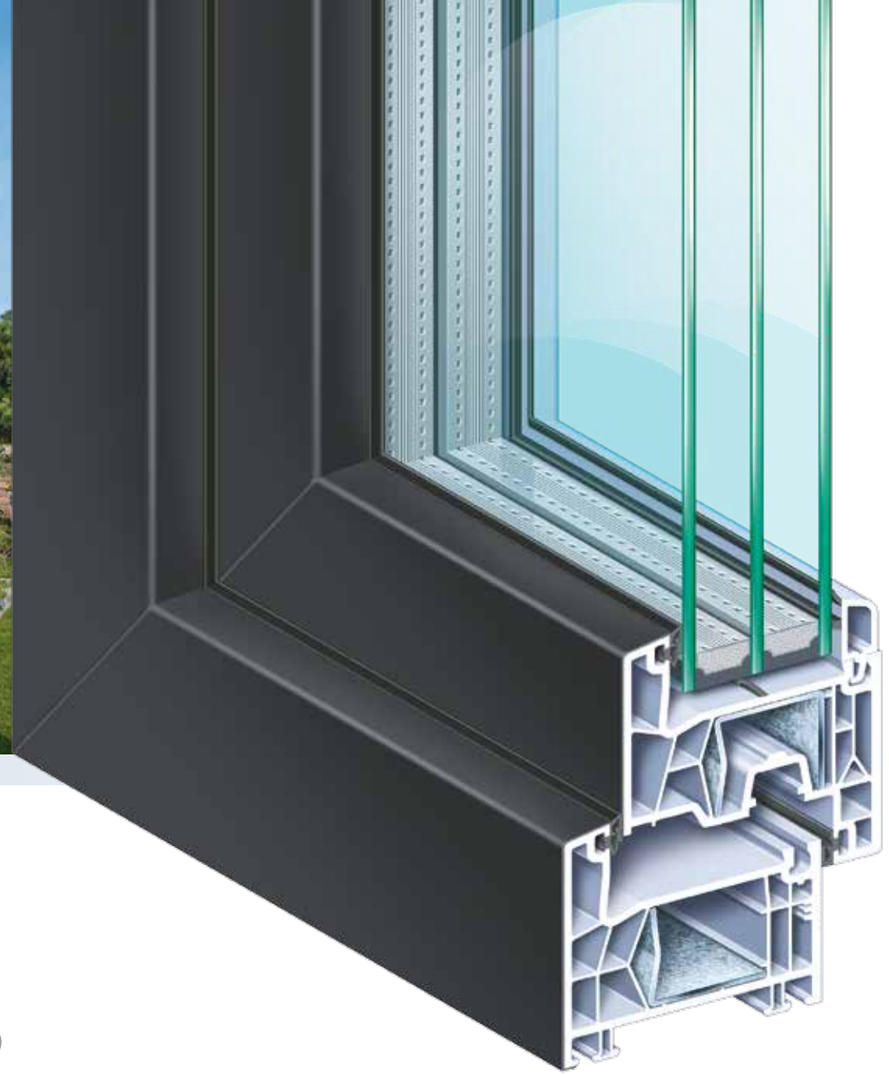
- **Application for effective sound insulating glass.**
- **Optimum sound insulation up to 47 dB with innovative seals.**

KÖMMERLING 76. The safety window.

Burglars often break into houses through windows, balconies and patio doors. KÖMMERLING 76 offers you protection against intruders because the window is design-optimised for anti-burglary fittings and safety glass.

As a result, it is far more difficult for a burglar to break open the window or smash the glass. KÖMMERLING 76 deters intruders and helps to keep your home safe.

- **For windows up to resistance class RC 2 (WK 2).**
- **Designed for anti-burglary fittings.**



WHAT DOES A WINDOW HAVE TO DO?

KÖMMERLING 76. The window that delivers added value.

KÖMMERLING 76 is uncompromisingly good. It offers you all the benefits of modern windows, from design to function, building physics and insulation values to environmental protection and value retention. And it is also designed to satisfy future needs and requirements.

More design

Slim profiles enlarge the transparent glass surface. They are also available in a comprehensive range of foil laminate colours, in wood finishes, in plain colours, and with aluminium facing shells for individual coating.

More heat insulation

The insulating chambers and ProEnergyTec versions guarantee excellent heat insulation.

More sound insulation

Combined with high quality functional glazing, the KÖMMERLING 76 system provides optimum sound insulation up to 47 dB.

More intruder protection

The window profiles are designed for the use of special security fittings and additional anti-burglary measures.

More seal tightness

The innovative seal levels keep out draughts, dust and rain to create a pleasant living environment.

More ease of care

The high quality surfaces are extremely weather resistant and easy to clean.

More stability

Optimally dimensioned steel reinforcements deliver perfect window statics. With AluClip Pro, the aluminium facing shell assumes the static function.

More convenience in use

All the latest fittings technology and all current opening concepts are possible for simplicity and convenience in use.

More ventilation

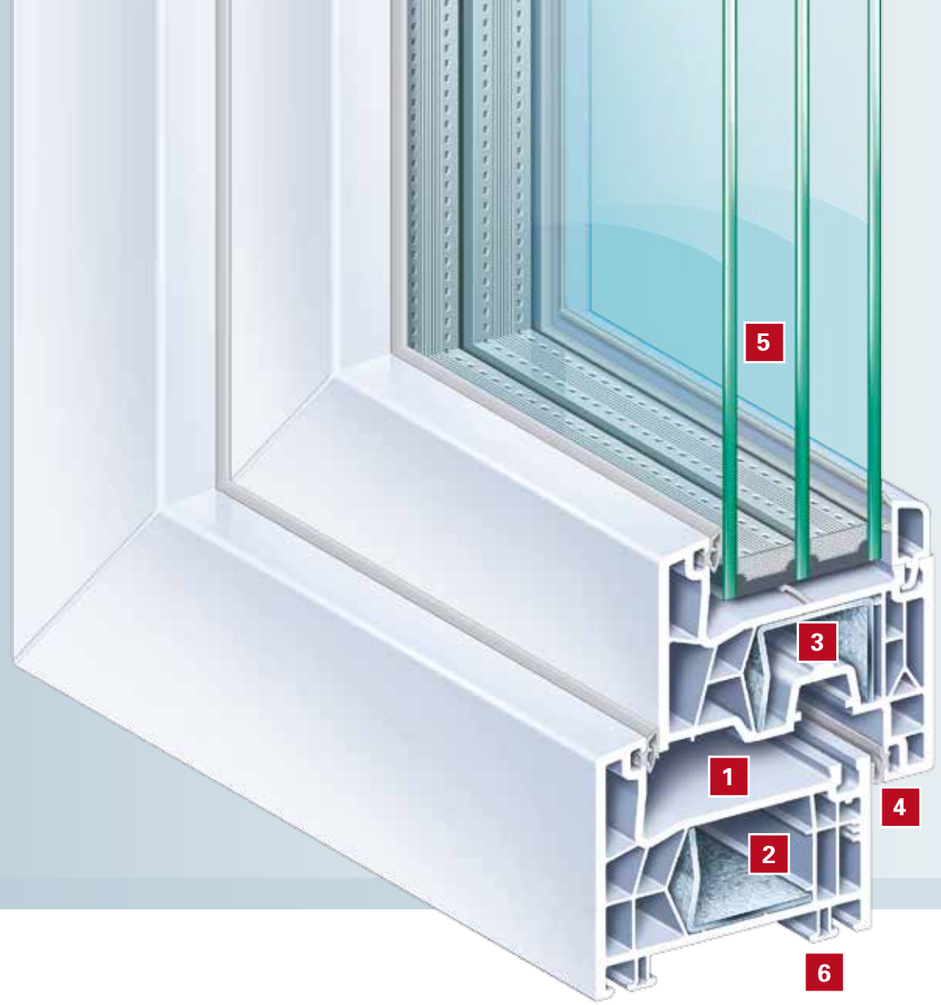
KÖMMERLING has an optimized ventilation programme that ensures a pleasant climate in the living environment.

More value

High quality, premium and environmentally friendly PVC-Us that reflect the greenline principle ensure durability and enhance the value of your property.

76 mm

The window profile's low construction depth doesn't just enhance the appearance of a new building, it is also perfect for renovation projects with complex architectural and energy-related requirements.



IS THERE SO MUCH TECHNOLOGY INVOLVED?

KÖMMERLING 76.
The innovative window.

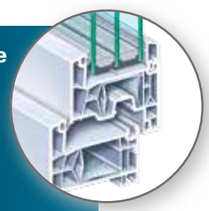
KÖMMERLING 76 incorporates the very latest technology currently available for PVC-U windows. One of its main strengths is its universal modular system principle. As a result, KÖMMERLING 76 offers maximum flexibility in satisfying individual requirements and offers excellent value for money.

The design is so innovative that despite having a relatively narrow profile, triple glazing with modern insulating glass is possible. Thanks to an innovative mounting concept, professional installation is fast, clean and simple. So replacing old windows with new modern ones that have the KÖMMERLING 76 system involves the minimum of mess.

1

High heat insulation value

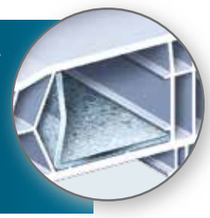
With standard windows, KÖMMERLING 76 already achieves an excellent heat insulation value of U_f = 1.1 W/(m²K).



2

High dimensional stability

Special supports keep the steel reinforcement in the correct position.



3

State-of-the-art chamber design

The chambers are designed on the basis of the latest calculation methods to ensure high heat and sound insulating properties, plus optimum profile stability and the strength to hold heavy glazing.

4

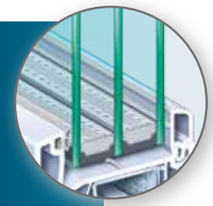
Reliable function

Connection of the load-bearing parts with several profile walls and additional thickening with special screw pins in the main load bearing zones.

5

Glazing

Large range of glazing from 50 mm to triple glazing or special functional glass.



6

Versatile and clean Installation

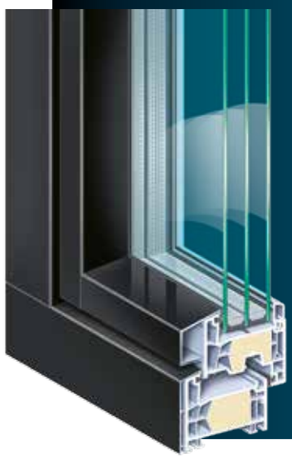
Windows with the KÖMMERLING 76 system can be installed with steel dowel pins, classic mounting anchors or special PVC-U dowel clips. Installation is fast, clean and safe.

Design options

Numerous laminating foils, surface textures and aluminium cases for customer-specific solutions.

proEnergyTec

Special technology which ensures high torsional stiffness eliminates the need for steel reinforcements inside the window. The reinforcement chambers are instead filled with ProEnergyTec foam, which enables the achievement of maximum heat insulation values.



WHY IS FRESH AIR SO IMPORTANT?

REGEL-air® 76

Correct, regular airing is becoming more important than ever, especially in face of the growing effectiveness provided by insulation in living space. When there is too little ventilation the relative air humidity rises constantly, quickly giving rise to a damp indoor climate that promotes the growth of mould.

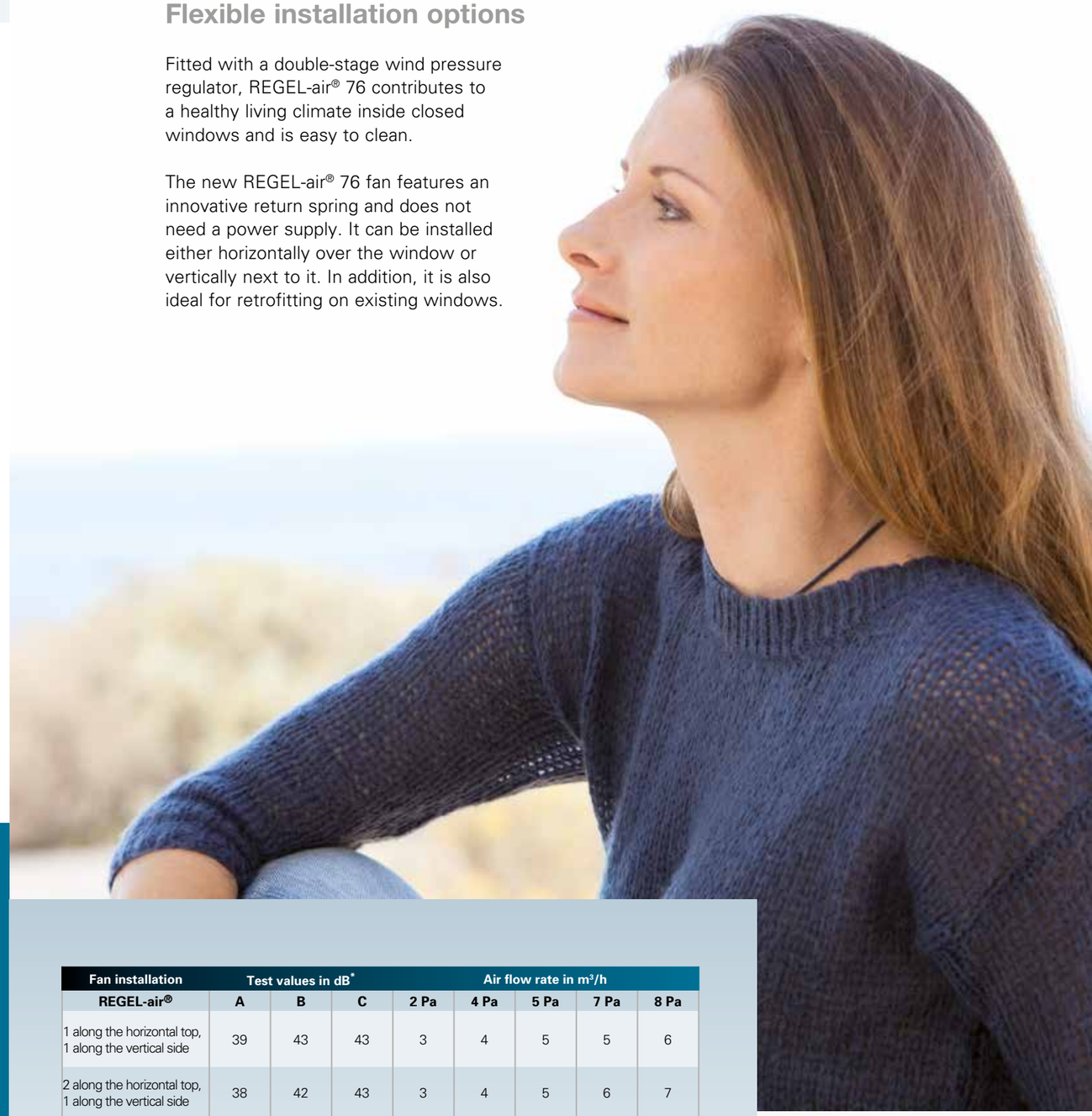
For this reason it is important that a healthy balance is reached between a sensible ventilation behaviour and the minimum heat loss. This safeguards on the one hand sustainable energy consumption, on the other the integrity of the building fabric that would otherwise suffer from the effects of moisture. REGEL-air® 76 from KÖMMERLING is your ventilation solution for a regulated supply of fresh air – and that fully automated, even without active ventilation.

- **Constant, uniform supply of fresh air.**
- **Minimises high air humidity and the risk of mould.**
- **Simple retrofit.**
- **Concealed in the outer frame rebate, so not visible from the inside and outside when the window is closed.**
- **Easy to clean.**
- **Tested sound insulation up to 43 dB (STC 4).**
- **Protection against driving rain and passage of air tested in accordance with DIN and EU standards.**
- **Ventilation in accordance with DIN 1946-6.**

Flexible installation options

Fitted with a double-stage wind pressure regulator, REGEL-air® 76 contributes to a healthy living climate inside closed windows and is easy to clean.

The new REGEL-air® 76 fan features an innovative return spring and does not need a power supply. It can be installed either horizontally over the window or vertically next to it. In addition, it is also ideal for retrofitting on existing windows.



Fan installation	Test values in dB*			Air flow rate in m³/h				
REGEL-air®	A	B	C	2 Pa	4 Pa	5 Pa	7 Pa	8 Pa
1 along the horizontal top, 1 along the vertical side	39	43	43	3	4	5	5	6
2 along the horizontal top, 1 along the vertical side	38	42	43	3	4	5	6	7
2 along the horizontal top, 2 along the vertical side	38	42	42	4	5	6	7	8

*Pane structure: A) 6/16/4/14/4 (36–37 dB)
B) 8 CSG SI/12/6/12/8 CSG SI (45 dB)
C) 12 CSG SI/20/8/20 CSG SI (48 dB)

CAN CLIMATE PROTECTION BE SO COMFORTABLE?

Passive house

Want to do a lot for the environment, yet save costs without sacrificing convenience and design? A passive house with KÖMMERLING 76 makes this possible. When fitted with the upgrade technologies AluClip Pro and proEnergyTec, the modern window system exhibits a thermal insulation value U_f = 0.93 W/(m²K), fulfilling the high energy saving requirements for passive houses. Yet KÖMMERLING 76 with AluClip Pro and proEnergyTec can offer a lot more besides.

The concept behind a passive house works only with a refined thermal insulation that limits the annual heating needs to 15 kWh per square metre of living space. This allows a building to be heated alone from passive energy sources without the need for a separate heating system. One of the most important components here is the window system. The slender profile sight lines presented by KÖMMERLING 76 with AluClip Pro not only allow a modern design with large glazed areas, but also increase solar gains.

- **Passive house compatibility as defined under ift directive WA 15/2.**
- **Elegant aluminium design for virtually unlimited colour schemes.**
- **High stability thanks to functional aluminium profiles.**
- **Highest thermal insulation values thanks to proEnergyTec technology.**
- **Fully recyclable.**

AluClip Pro

KÖMMERLING 76 AluClip Pro gives you the best of two worlds: aluminium and PVC-U in the one innovative system. Aluminium presents a convincing elegance, the best weather resistance, high stability, and a wide range of colours. PVC-U provides the optimal thermal and sound insulation in addition to functional reliability. Yet another advantage – The functional aluminium profile takes over the load bearing functions, so no steel reinforcements are needed.

proEnergyTec

The reinforcing chambers in the sash and frame are filled with proEnergyTec foam. Also possible is the combination with sash steel reinforcement and proEnergyTec in the frame. This technology achieves the highest thermal insulation values and can be recycled easily at a later date. The values are so good that KÖMMERLING 76 with AluClip Pro and proEnergyTec fulfils passive house requirements.

HOW MANY COLOURS DOES THE WORLD ACTUALLY?

KÖMMERLING 76. The design window.

It is the windows that are decisive in lending your building that unique and unmistakable character. Besides size and shape, particularly the colour scheme and elegance of the materials play a vital role.

KÖMMERLING 76 is your key to a playground of huge design potential. This universal system makes all of your wishes come true – whether for new buildings or as a solution matching the style of renovated historical buildings. Specifically architects and planners find in KÖMMERLING 76 the maximum freedom they need to design attractive facades.

Classical white

Timeless white of enduring beauty because the quality PVC-U of KÖMMERLING 76 is extremely weather resistant, retaining its smooth, glossy surface. It is also easy to clean.

Plain colours for laminations

This lamination brings colour into play. The surface is extremely weather resistant and easy to clean.

Woodgrains for laminations

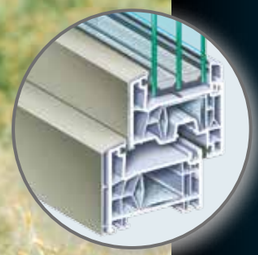
The woodgrain lamination unites the natural look with the advantages of robust PVC-U. The regular paintwork usual for wooden profiles is no longer necessary, and your house receives an accentuated farmhouse style.

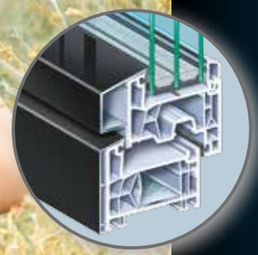
pro Cover Tec
protected *by* **colour**

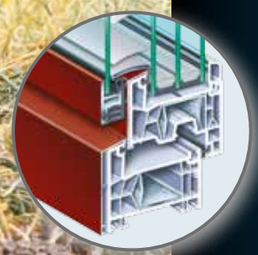
The innovative surface technology

This new, unique, and innovative surface finish combines function with longevity and aesthetics. The proCoverTec surface is extremely tight and homogeneous, and its satin look lends your window profiles a quality look with a slightly textured, pleasant feel. It offers the optimal protection for your window profiles and minimises dirt deposits. Choose from our unmistakable range of plain and metallic colours! You can choose between single sided and full cover.

IS THAT ALUMINIUM OR PVC-U?







KÖMMERLING 76. The combination window.

Aluminium is a window material that is distinguished by its unique elegance, it has optimum weather resistance, high stability, easy clean properties and practically unlimited colour options as a result of finishing techniques such as powder coating in RAL colours or Eloxal. On the other hand, PVC-U delivers optimum heat and noise insulation, and high functional reliability.

With KÖMMERLING 76, you get all the advantages of aluminium and PVC-U in one single, innovative system. So you have the widest possible range of design options, and the windows satisfy increasingly discerning requirements of energy efficiency.

AluClip

The aluminium facing shell for KÖMMERLING 76 gives you the best of both worlds: elegant aluminium design in a practically unlimited range of colours, plus the optimum insulation values of a modern PVC-U profile system.

AluClip Pro

The AluClip Pro has an aluminium profile connected to a PVC-U profile. The aluminium performs the static function so no steel reinforcement is necessary inside the window sash. The reinforcement chamber is filled with ProEnergyTec foam. The additionally insulated profiles guarantee extraordinary high heat insulation.

AddOn

The interconnecting aluminium frame not only boasts modern design, it also has an optional integrated privacy and sun protection feature. The additional glass pane additionally improves its heat and noise insulation properties.

AND WHERE CAN I GET THE MATCHING DOORS?

KÖMMERLING 76. The all-round system.

KÖMMERLING 76 isn't just our most innovative window and door system, it's also the most comprehensive one. In fact, it leaves absolutely nothing to be desired.

Windows and doors contribute to the building's overall aesthetic appeal and give it its own unique character. Whatever your own personal preferences are, with KÖMMERLING 76 you can design windows and doors to your own specifications. Our burglar-safe doors give you a choice of modern functional glazing with many different surface textures, glazing with LED lighting effects, motif glazing and they can also incorporate glazing chosen from the comprehensive ready-to-use programmes of reputed manufacturers.

- **Front doors, balcony and patio doors, parallel slide-and-tilt doors.**
- **Excellent intrusion protection – up to resistance class RC 2 (WK 2).**
- **Maximum steel r einforcement and weldable corner connectors for high stability.**
- **Maximum sash size:**
  Front door, single leaf 1200 x 2400 mm
  Front door secondary sash 100 x 2400 mm
- **Use of special functional glazing or conventional door glazing up to 50 mm.**
- **Excellent tightness through double threshold seal.**
- **Perfect rain and wind protection.**
- **High heat insulation.**
- **Vast range of design options in a comprehensive selection of colours, textured surfaces and elegant aluminium facing shells.**

WOULDN’T IT BE GREAT IF EVERYONE JOINED IN?

KÖMMERLING 76.
The green window.

As little as possible and as much as necessary is the best motto for sustainable environmental protection. This is the only way to conserve valuable natural resources.

KÖMMERLING 76 is designed according to green principles. Optimum function and insulation values, plus the best possible use of materials, are the objectives that we have achieved with this new system generation.

KÖMMERLING 76 is also made of a PVC-U that has the greenline label. In other words, no lead has been used to stabilise the PVC-U. Instead, an environmentally friendly calcium-zinc based stabiliser has been used.

And what happens at the end of its life cycle? Then the old window components are used to make new ones. Our recycling initiative facilitates a sustainable materials cycle.

When the ProEnergyTec profiles are filled with a foam, only green propellants are used. During the recycling process, the foam and PVC can be cleanly separated from each other.

greenline

- **Optimised and resource-saving use of materials.**
- **Green lead-free stabilisers with the greenline label.**
- **Reintroduction into the sustainable material cycle through professional recycling.**
- **Major contribution to CO_2 reduction – as a result of excellent heat insulation properties, you use less heating energy and considerably reduce your impact on the environment.**

WHAT WILL THE FUTURE LOOK LIKE?

KÖMMERLING 76. The future-safe window.

People who opt for KÖMMERLING 76 when building or renovating a home today are making a future-safe decision because their high quality means that you'll be able to enjoy them for many years to come.

At the same time, by choosing KÖMMERLING 76 you are assuming comprehensive responsibility. High energy savings, timeless elegance, and long-lasting quality are the decisive factors. They increase the value of your property and create long-term comfort and stability for your family.

KÖMMERLING 76 is the best system in its category. It is a unique, universal system that is available in practically unlimited variations. It offers brand new design options for creating sustainable living space to people who are building or renovating their home, architects, and planners.

- **High energy and cost savings with a new, high insulation 76 mm system.**
- **Enhanced quality of life through perfect-sound insulation.**
- **Additional security as a result of anti-burglary features.**
- **Easy-care, robust and weatherproof surfaces.**
- **Retains value due to durability and excellent quality.**
- **Excellent ease of operation and reliable function through state-of-the-art technology.**

Subject to technical modification! Product code 2 01 130150 - 0618.BM

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