

A PLEASURE TO MARVEL AT

Kömmerling 76 double seal

# WHEN VISIONS COME TRUE

Are all windows equal? Not at all. A Kömmerling window is in a clas of its own with its excellent quality and functionality, as well as its compelling design and the comfort it gives occupants. And last bu not least, thanks to the sustainable design process, in which we do not follow short-lived trends, but instead keep future generations ir mind. How did it come about? Read on to find out more.

It all began in 1897. Karl Kömmerling founded a company that initially manufactured adhesives and synthetic rubber. He showed great foresight even then, attaching great importance to high quality standards and the most advanced technologies from the very beginning. In 1957, the production of PVC-U roller shutters began, and this was followed by high-quality PVC-U window profiles in 1967. However, no matter what was produced, all products from Kömmerling set new standards and proved successful in making history.

#### **EXPERTISE THAT YOU CAN BENEFIT FROM**

Today, Kömmerling is one of the leading window system manufacturers. We offer decades of experience, extensive research and development work, state-of-the-art computer technologies and simulations, countless tests – all of which goes into every one of our products, whether windows or doors. This is also the case with the series Kömmerling 76 double seal. Or to put it another way, we are synonymous with innovative solutions that you can count on. Today, tomorrow and beyond.



 $oldsymbol{3}$ 



# MORE SUNLIGHT, MORE WARMTH

# Clever solutions for maximum light entry

You may already have a sense of how people benefit from sunlight on a day-to-day basis. It puts us in a good mood, creates a feel-good atmosphere, gives us energy and is also good for our bodies. These are all sound reasons for bringing sunlight into your home. And Kömmerling 76 double seal makes this easy.

The clincher is that the innovative profile technology enables us to make windows and doors with huge glazed areas that are nevertheless particularly stable. They have been designed so that they can be combined with state-of-the-art functional glazing, e.g. antisolar glass. The result is that sunlight can be used optimally – for a light-flooded ambience and reduced heating costs. They really do offer a good outlook.

#### **AT A GLANCE**

- > The intelligent profile design increases window stability
- The narrow profile sight lines ensure maximum light entry
- Heating costs are reduced because optimal use is made of the sun

 $\mathbf{4}$ 

## HEAT COMES IN, BUT DOESN'T ESCAPE

Sustainable window and door solutions that give you a warm glow

It is more important than ever that we make careful use of resources. It's nice if your windows and doors can also play a role in this. When you choose our Kömmerling 76 double seal window and door system, this not only reduces your energy costs, but also minimises your CO<sub>2</sub> footprint. It is reassuring to be able to act sustainably when you choose your windows.

This generation of PVC-U windows and doors are particularly pleasant and makes saving energy a matter of course. Simply install (have installed) and even enjoy lower expenses with an elegant look.

#### **EVEN MORE HEAT GAIN: WITH ALUCLIP PRO**

Even in the standard design, the elements of Kömmerling 76 double seal have very good thermal insulation properties, which are also thanks to the generous glazed areas. The AluClip Pro's aluminium functional profile means that steel reinforcement in the sash or frame is not necessary, which further improves the thermal insulation.

#### **GLASS WITH POWER**

High-quality triple glazing or functional glazing up to 50 millimetres thick can be used in Kömmerling 76 windows and doors. This shielding means that no heating energy is lost and the large windows let in a particularly large amount of solar heat – for a sunny outlook all round.



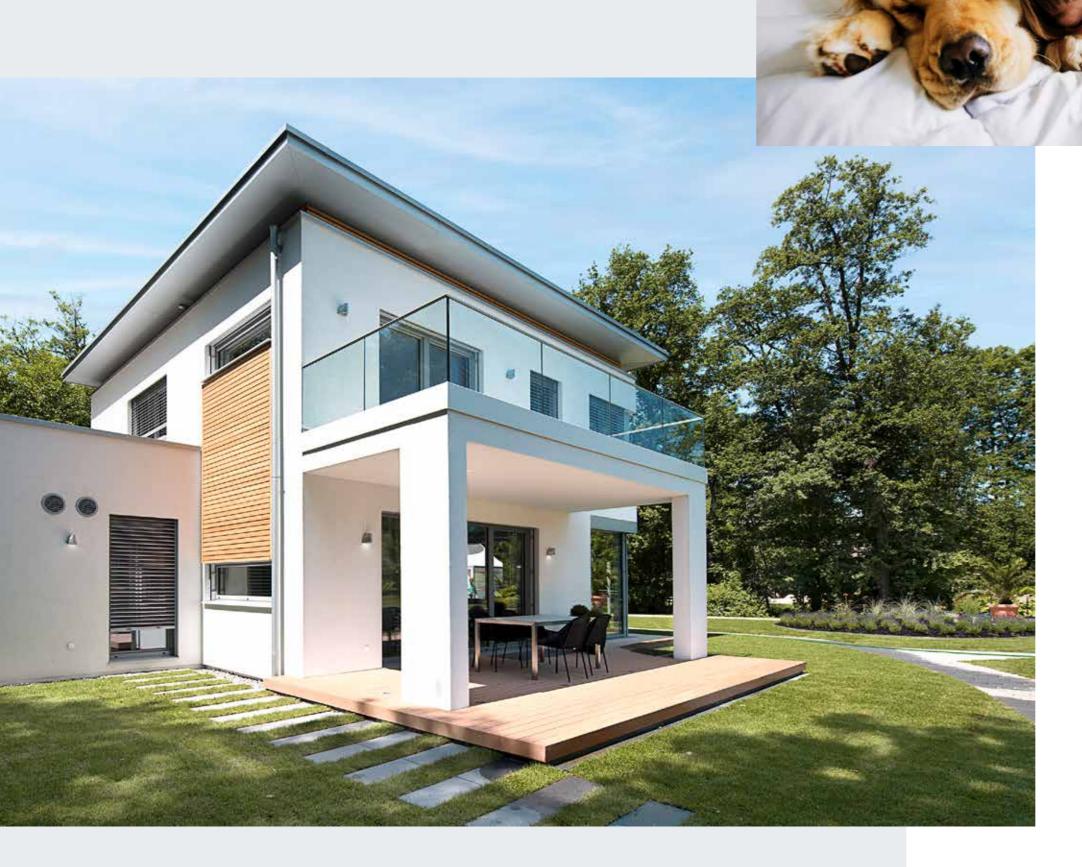


# TODAY FOR TOMORRO PEACEFUL SLEEP, RELAXED LIVING

# Burglary protection stops thieves

Windows, balcony and terrace doors attract burglars almost magically. So, it's a good thing that you can spoil their fun with high-quality elements of Kömmerling 76 double seal. These window and door systems can be effortlessly equipped with burglar-resistant hardware and security glass – providing effective protection for you and your family. These features make it significantly more difficult to pry open the windows or break the glass. And you can enjoy peace of mind.

- > For windows up to resistance class RC 2 (MC 2)
- > Designed for burglar-resistant hardware



TODAY FOR TOMORROW

## **AVOID NOISE**

#### With sound insulation

Just imagine, you're lying on the sofa, you prick up your ears and listen – and there's not a sound to be heard! Why is this? It's thanks to your new Kömmerling 76 window and door system. Their proven sealing technology combined with sound-insulating panes keep street noise and other sounds outside. This prevents you and your family from being subjected to unhealthy noise-related stress. And if something does rob you of your sleep, it's most likely to be an exciting crime novel – and not the traffic chaos outside.

#### AT A GLANCE

- > Use of sound-insulating panes possible
- Optimum sound insulation of up to 47 dB thanks to proven seals

TODAY FOR TOMORROW

TODAY FOR TOMORROW



# THE WINDOW THAT CAN SIMPLY DO MORE

Kömmerling 76 double seal for future-proof perspectives

Kömmerling 76 double seal windows and doors mean that you are thinking about tomorrow today. They are true all-rounders and geared towards sustainability. These window solutions have excellent features and are carefully considered down to the smallest detail. Their excellent insulation values mean that the windows not only create a feel-good climate for you, but also for nature – because they even conserve resources. And, thanks to their top quality and innovative technologies, Kömmerling 76 double seal windows and doors can withstand a lot and are particularly robust. In short, they offer comfort, environmental protection and value retention all in one.

#### AT A GLANCE



#### Improved designs

The slender PVC-U profiles of straight lines give the system a modern look. Individual variety is also ensured by the wide colour range in plain or metallic colours and with woodgrain or aluminium shell.



#### Improved thermal insulation

Even in the standard version, the Kömmerling 76 double seal offers a high level of thermal insulation with a U<sub>f</sub> value up to 1.1 W/(m<sup>2</sup>K).



#### Improved sound insulation

Combined with high-quality functional glazing, the Kömmerling 76 double seal system offers you outstanding noise protection of up to 47 dB.



#### Improved security

The window and door profiles can be reinforced with security hardware and additional burglar-resistant measures without any problems



#### Improved weather tightness

Innovative sealing levels keep out draughts, dust and rain. In addition, they ensure a pleasant feel-good climate and optimise thermal insulation.



#### Improved easy care

The surfaces of the PVC-U profiles are extremely weather-resistant and easy to clean.



#### Improved stability

High-quality steel reinforcements provide perfect window statics. In the AluClip Prodesign, this is ensured by the aluminium functional profile, which also reduces the weight.



#### Improved handling ease

The innovative fittings technology makes opening and closing the window solutions effortless. All common opening types can be provided.



#### Improved ventilation

A sophisticated ventilation program ensu-



#### Improved lasting value

ne night quality of all components and the use of high-quality, environmentally friendly PVC-U in accordance with the greenine principles are the basis for durable olutions. This increases the value of your property in the long term.



#### Improved possible applications

The PVC-U profile has a installation depth of 76 mm. This makes the Kömmerling 76 double seal windows and doors ideal for renovations that are architecturally demanding and/or have high energy requirements.



# CAREFULLY CONSIDERED DOWN TO THE SMALLEST DETAIL

Kömmerling 76 double seal Individual. User-friendly. Clever.

Kömmerling 76 double seal contains all the proven technologies for PVC-U windows on the market. For example, it makes use of the sophisticated modular principle. This allows you to implement exactly the window and door solution that meets your individual requirements and is still cost-effective. The groundbreaking design with particularly narrow profiles has an airy effect, yet allows triple glazing with insulating glazing, while also being transparent. The carefully considered connection options are another advantage. These enable the windows to be installed quickly, cleanly and without great effort. Even if you want to replace old windows with Kömmerling 76 double seal, this is quite straightforward.

#### **HIGH THERMAL INSULATION VALUE**

Even in the standard design, Kömmerling 76 double seal boasts an excellent thermal insulation value up to  $U_f$  value = 1.1 W/( $m^2$ K).

#### **HIGH DIMENSIONAL STABILITY**

Cleverly designed contact points keep the steel reinforcement in the correct position.

#### PIONEERING CHAMBER DESIGN

The chambers in the PVC-U profiles have been developed using cutting-edge computing methods. This results in high thermal and sound insulation as well as optimum profile stability and high load-bearing capacity even with heavy glass.

#### **SAFE FUNCTIONALITY**

Kömmerling 76 double seal can withstand a great deal thanks to its intelligent features. The load-bearing hardware is screwed through several profile walls. Furthermore, there is additional thickness from special bolting cams in the main load zones.

#### **WIDE RANGE OF GLAZING VARIANTS**

You can choose between different 50 milimetre thickness glasses, whether as triple glazing or as special functional glazing, such as thermal insulation glass, safety glass or sound-insulating glass.

#### **FLEXIBLE, CLEAN INSTALLATION**

Windows and doors from the Kömmerling 76 double seal series can be fixed with dowel pins for steel, classic fixing brackets or with a special dowel chamber for plastic. Installation is quick, clean and safe.



TODAY FOR TOMORROW

# VENTILATE PROPERLY – COMPLETELY AUTOMATIC

Kömmerling 76 double seal REGEL-air®

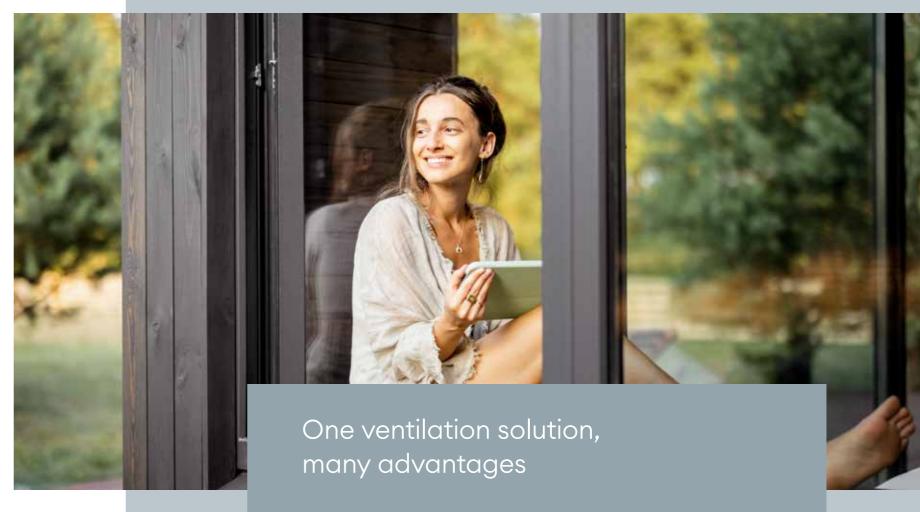
Today's living spaces have the best possible insulation. This means that proper, regular ventilation is more important than ever. This is because inadequate ventilation increases humidity and promotes mould growth, which is not only unpleasant, but also affects your health and, ultimately, even the building fabric. However, if you constantly open the windows, you will waste energy unnecessarily.

Balance is the magic word – the balance between sensible ventilation behaviour and minimal heat loss. With REGEL-air®, Kömmerling presents a ventilation solution that combines all this in one component. It ensures a regulated supply of fresh air, thereby creating a healthy, value-preserving indoor climate. And it does all this fully automatically, without any manual ventilation.



- > Continuous, even supply of fresh air
- > Reduces air humidity and the risk of mould
- **>** Easy to retrofit
- Invisible from indoors and outdoors when the window is closed, because it is integrated into the outer frame rebate
- > Easy to clean
- > Tested sound insulation up to 43 dB (STC 4)
- Tightness against driving rain and passage of air as per DIN and EU standards
- > Ventilation as per DIN 1946-6





The operating principle of REGEL-air®: A two-stage wind pressure control ensures a healthy climate even when the windows are closed. This creates a feel-good atmosphere, without any intervention on your part. This is particularly practical, even if you are on holiday or away from home for a long time during the day, for example. In addition, these fans are easy to clean.

Another intelligent feature of REGEL-air® is the innovative return spring that works without electricity. The ventilation solution can also be installed horizontally above the window or vertically next to the window. Existing windows can also be conveniently upgraded with REGEL-air®.

Fan installation	Test values in dB*			Air passage in m³/h				
REGUL-air®	Α	В	С	2 pairs	4 pairs	5 pairs	7 pairs	8 pairs
1 horizontal at the top, 1 vertical at the side	39	43	43	3	4	5	5	6
2 horizontal at the top, 1 vertical at the side	38	42	43	3	4	5	6	7
2 horizontal at the top, 2 vertical at the side	38	42	42	4	5	6	7	8

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

# VENTILATION AS IF BY MAGIC

#### Kömmerling 76 double seal ClimaTec Plus

ClimaTec Plus ensures good air, almost by itself. This self-regulating window rebate ventilator provides a controlled supply of fresh air even when the window is closed, completely without manual ventilation. For all its efficiency, ClimaTec Plus is almost invisible when the windows are open. This is because the fan is mounted in the upper area of the window sash instead of the sash leg seal. In addition, ClimaTec Plus is available in light grey or black to match the colour of the window seals. Depending on the required air volume and sound insulation, up to three fans can be installed.

Air flows via the window rebate, the space between window sash and outer frame. To do this, the outer frame seal is partly replaced by replacement seals. This allows the air to flow into the window rebate due to pressure differences and further into the room interior via ClimaTec Plus. In addition, the centre seal in the upper area is notched to the fan length. The innovative flow control technology of the regulating flaps provides sensitive airflow regulation, which limits the airflow in the event of high wind loads and consequently prevents draughts.

ClimaTec Plus		Variant 1 single	Variant 2 double	Variant 3 triple	Variant 4 single acoustic	Variant 5 double acoustic	Variant 6 triple acoustic				
Test report no.	18-001463_PR13 (see GAS: 18_001463_PR14)										
	(Pa)	Air m³/h									
Air volume flows	2	2.4	4.5	5.8	2.2	3.6	4.2				
	3	3	5.5	7.2	2.8	4.4	5.2				
	4	3.5	6.3	8.3	3.3	5.2	6.2				
	5	4	7.1	9.3	3.7	5.9	7				
	6	4.4	7.8	10.3	4.1	6.5	7.8				
	7	4.7	8.4	11.1	4.5	7.1	8.5				
	8	5.1	9	11.9	4.8	7.6	9.2				
	10	5.7	10.1	13.4	5.4	8.6	10.4				
Tightness against driving rain		Class									
(A)		9A	8A	5A	6A	7A	4A				
Pane structure (Window value without fan in dB)		Airborne sound insulation/test value in dB									
<b>4-16-4</b> (24 mm/34 dB)		33	30	30	34	34	32				
<b>8-16-4</b> (28 mm/39 dB)		38	33	32	38	38	36				
<b>12 SI-20-8-SI</b> (40 mm/47 dB)		44	34	33	46	44	39				
<b>8-12-4-12-4</b> (40 mm/40 dB)		44	34	33	46	44	39				
<b>10-14-4-14-6</b> (48 mm/42 dB)		40	34	33	41	40	37				



> Ventilation as per DIN 1946-6 and DIN

## GIVE FREE REIN TO YOUR IMAGINATION





#### Colours and surfaces

Windows and doors give your flat or house its own identity. Shape, size, but above all colour and material appearance ensure the desired look, whether noble-minimalist or bold expressive.

All the better that Kömmerling offers a wide range of shades and surfaces that enable many design options. Whether for new building or renovation of historic buildings, you will find the visual solution that suits your project.

Would you like to get first impression



#### **ELEGANT WHITE**

White is the classic par excellence, but also delicate. However, Kömmerling 76 double seal windows are made of high-quality PVC-U, which is characterised by its extreme weather resistance. This keeps the smooth, shiny surface of the PVC-U profiles beautiful for a long time. These windows are also practical for everyday life as they are extremely easy to clean.



#### LAMINATION IN PLAIN COLOURS

Whether strong red, delicate blue or elegant dark grey – with laminated solutions, you are spoilt for choice in terms of colour. However, the plain-coloured ones have one thing in common with the white variants. They are also extremely weather-proof and easy to clean.



#### **WOODGRAIN LAMINATION**

Lamination with a wood structure kills two birds with one stone: It gives your home the cosy feel of a country house, yet is highly functional. This is because the windows are made of durable PVC-U. This saves regular repainting, as is necessary with wooden profiles.

# THE CLEVER COATING

proCoverTec

Our unique proCoverTec surface technology is aesthetically and functionally impressive. The slightly textured surface lends them a pleasant feel. This is extremely tight, homogeneous and therefore very durable. In addition, proCoverTec surfaces are very suitable for everyday use. They provide the PVC-U profiles with the maximum protection and reduce the adhesion of dirt particles.

While the indoor side always remains neutral white, there is a wide range of plain and metallic colours to choose from for the outer coating. And for even more variety, you can choose between one-sided colour coating or all-round coating. However, one thing is always the same – the silk matt look of the surfaces, which gives them a very sophisticated appearance.





#### Kömmerling®

## A PERFECT MATCH: PVC-U AND ALUMINIUM



# Two materials in perfect combination

When PVC-U and aluminium come together, the result is fascinating. PVC-U boasts high thermal and sound insulation as well as extreme functional safety. Aluminium impresses its unique elegance, optimal weather resistance and high stability. In addition, the material is easy to clean and enables an almost unlimited variety of colours – thanks to finishing techniques such as powder coating in RAL colours or anodising. Wouldn't it be nice if you could combine all these qualities?

Kömmerling 76 double seal combines the strengths of PVC-U with the advantages of aluminium, and does so in three variants: AluClip, AluClip Pro and AddOn. While this gives you the greatest possible scope for creativity, your windows also meet energy efficiency requirements. In a nutshell, they are visually and environmentally pleasing.



#### AluClip

The AluClip variant combines PVC-U profiles, which guarantee optimal insulation values with an elegant aluminium design in an almost unlimited variety of colours.



#### **AluClip Pro**

On the AluClip Pro, the aluminium profile is bonded to the PVC-U profile. The aluminium takes on the static function, meaning that steel reinforcement within the window sash is not required.



#### AddOn

As you like it: On request, your Kömmerling 76 window solutions can be equipped with additional shutter systems and sunshades. In combination with the additional pane, this means greater thermal and sound insulation and therefore even better energy efficiency.

# WHEN THE RESIDENTIAL DOORS MATCHES THE WINDOW

Kömmerling 76 double seal – the end-to-end system

Would you like your house to have a uniform look? That's a piece of cake.
Kömmerling 76 double seal not only does windows and balcony doors to
perfection, but also residential doors. After all, it is our most comprehensive
window and residential door system and will certainly meet your every need



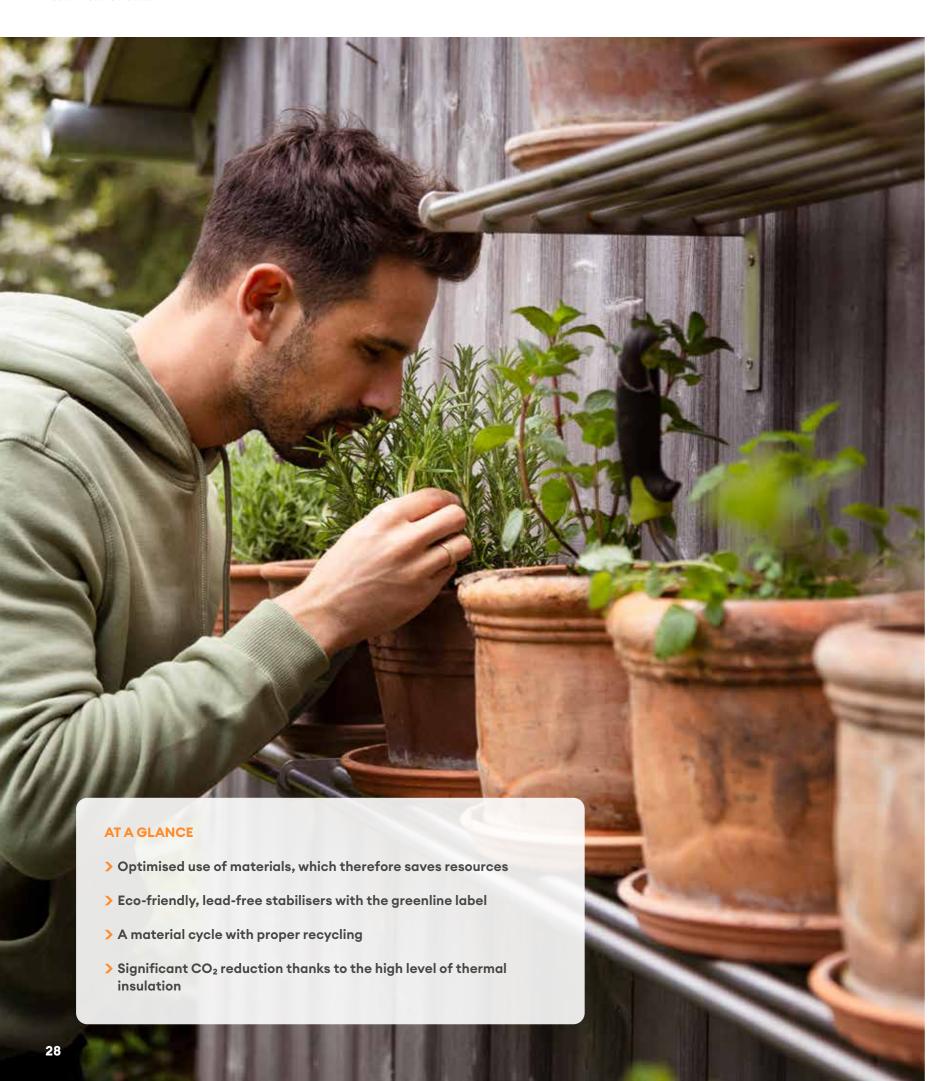


Just like windows, residential doors also shape the character of a home. Functionality and comfort are also vital. That's why residential doors of Kömmerling 76 double seal are always the right choice – because they match your windows perfectly. This not only creates a harmonious look, but also provides you with a wide range of options. For example, there are burglar-proof residential doors with modern functional glazing in numerous surface patterns and colours. Or you could opt for glass with LED effect lighting or motif glazing. And if that's not enough for you, you can also fall back on the extensive ready-made panelling range of renowned manufacturers.

#### **AT A GLANCE**

- A wide variety of products: House, balcony and terrace doors, parallel sliding-tilting doors
- High burglary protection up to resistance class RC 2 (WK 2)
- Maximum dimensioned steel reinforcement and welded corner connectors for higher stability
- > Maximum sash sizes:
  Residential door single-sash 1200 x 2400 mm
  Residential door floating mullion sash 1000 x 2400 mm
- Use of special functional glazing or commercially available residential door panelling up to 50 mm
- High level of tightness thanks to double sealing for thresholds
- > Perfect protection against driving rain and wind
- > Excellent thermal insulation
- Wide design spectrum: PVC-U white, foils in uni and metallic colours, smooth or grained, foils in wood grain, Kömmerling AcrylColor and aluminium shells AluClip





## WE ARE TAKING ACTION NOW, SO THAT WE HAVE A FUTURE TOMORROW

What sets us apart is that we concentrate on the essentials. But what does that really mean? That we're already thinking about tomorrow today and our efforts go beyond theory. We move on to taking action – with window and door systems that conserve resources, production technologies that ensure optimal use of materials, and durable solutions that your children, and maybe even your grandchildren, will still be able to enjoy.

We always keep environmental considerations in mind when developing Kömmerling 76 double seal. This generation of window and door systems, for example, offers groundbreaking functionality and excellent insulating values. We also manufacture Kömmerling 76 double seal greenline PVC-U. For us, sustainability starts at the beginning – with the raw materials. For almost two decades we have abstaining from all lead-based stabilisers in the PVC-U virgin material. We also give old windows a new lease of life, using them to make components for new windows. This creates a sustainable material cycle. It's all quite clever – and far-sighted. So that you can still enjoy it tomorrow.









Are you planning a new building? Or the renovation of a building? And do you think that it's important to have a lowCO<sub>2</sub> footprint? We can make one decision easy for you – choosing the optimal window and door system. Because Kömmerling 76 double seal is exactly what you are looking for – an aesthetic, sustainable and multifunctional solution that can be used flexibly and is a pleasure to use in the long term.

Kömmerling 76 double seal window systems not only ensure high energy savings, but are also extremely robust and impress with their timeless elegance. This increases the value of your property and creates a feel-good atmosphere for you and your family.

A particularly interesting aspect for developers, renovators, architects and planners is the fact that Kömmerling 76 is a universal system without equal. This is because the abundance of variants and designs opens up countless design possibilities. Perfect for making your dream, sustainable living spaces a reality.

#### #KömmerlingForTomorrow

profine GmbH **Kömmerling** 

Zweibrücker Straße 200 66954 Pirmasens Tel. +49 (0) 6331 560 E-mail: info@koemmerling.com

www.koemmerling.com

