

BEAUTIFUL PROSPECTS FOR YOUR FUTURE Kömmerling 76 centre seal

## VIEWS WITH A PROFILE

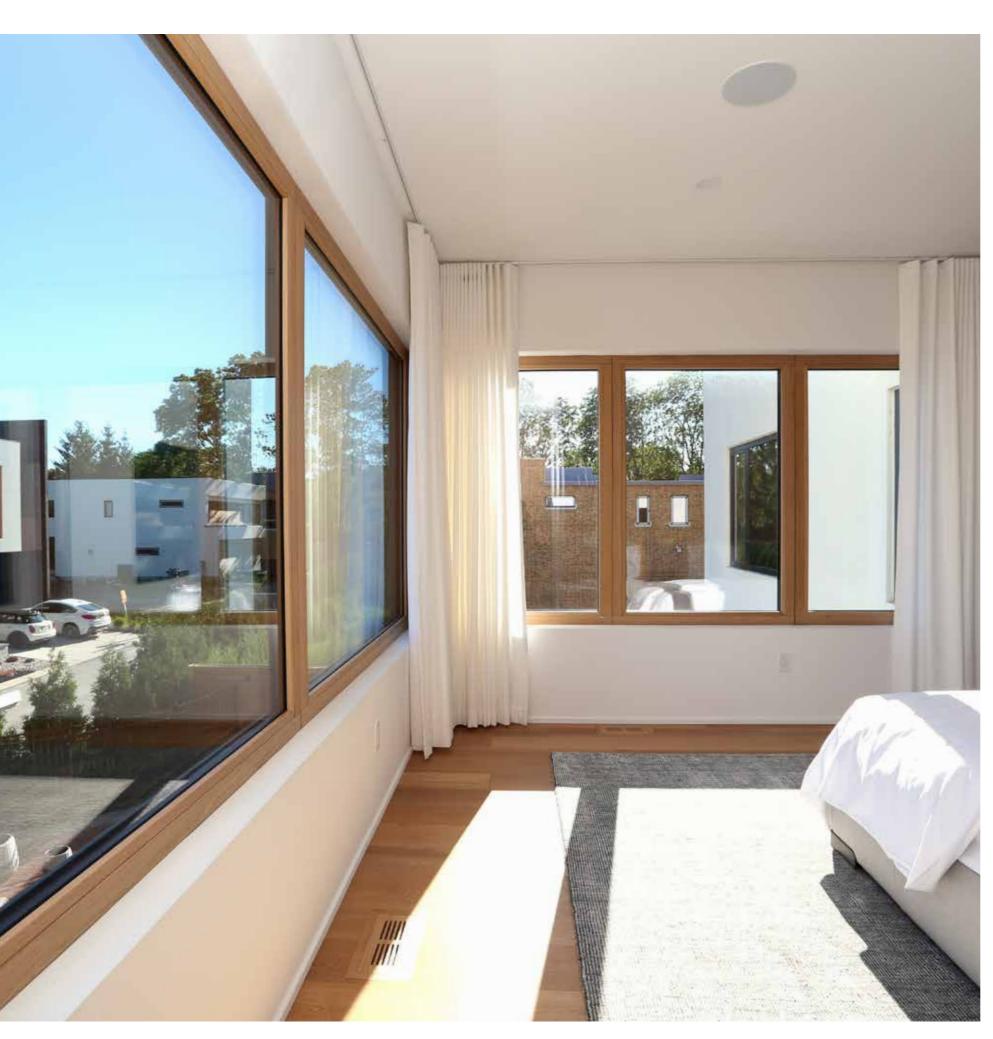
# Successful prospects, right from the start

High-quality solutions tailored to customer needs: This has been precisely the Kömmerling vision from the very beginning. Even when Karl Kömmerling founded the company in 1897, he focused on high standards, advanced technologies and tailored products. Kömmerling continues to follow this recipe for success. Initially, adhesives and synthetic rubber were produced, and in 1957 plastic roller shutters were added.

#### WINDOWS THAT BRING A NEW PERSPECTIVE

1967 marked another milestone for today's activities. That's when Kömmerling started producing high-quality window profiles made of PVC-U. This ultimately resulted in a whole range of high-quality window and door systems. Solutions that customers can rely on – because each of the Kömmerling products builds on the entirety of experience, years of research and development, state-ofthe-art computer technologies and the results of countless tests. In doing so, we always consider sustainability and future-proofing. In this way, every single product is a real Kömmerling. Perfect for gazing into the distance, discovering new perspectives and looking ahead.





# **SHINE LIKE THE SUN**

Light is exhilarating, motivating, inspiring. Wouldn't it be nice if we could savour this effect as often as possible?

Kömmerling 76 centre seal window systems are ideal for this. We use innovative technologies to manufacture windows and doors with large glazed areas and slender profiles. This gives the incoming sun enough space to stream in, creating rooms flooded with light.

For all their transparency, Kömmerling 76 centre seal solutions are extremely resilient thanks to high static and state-of-the-art functional glazing. At the same time, the generous glass fronts provide the basis for optimal heat utilisation. This saves heating costs and conserves resources.

Or to put it another way: With Kömmerling 76 centre seal windows and doors, you bring the sunshine to you - in every respect.

#### **AT A GLANCE**

- greatest possible amount of incoming light
- > Higher solar energy gains additionally reduce heating costs

### **Kömmerling**<sup>®</sup>

> The intelligent profile design improves window stability

> The slender profile sight lines create optimum space for the

## ENJOY THE SUNNY SIDE OF LIFE

Kömmerling 76 centre seal windows and doors will quickly warm your heart: You can reduce heating costs, thus making your budget go further and contributing to climate protection through the careful use of resources. But more than that – we even make saving energy a real pleasure. Our window solutions are also impressive thanks to their comfort and elegant, understated look.

#### INTELLIGENT TECHNOLOGY ALL AROUND

Three aspects are particularly important for thermal insulation: The PVC-U profile, insulating glazing with the edge connector and the wall connecting profiles. We have considered all this in our window designs and optimised them effectively. Kömmerling 76 centre seal windows and doors can also be equipped with an aluminium functional shell on the sash (AluClip Pro). This additionally improves the thermal insulation properties of the windows and doors solutions, which are already good to start with. This is because AluClip Pro assumes a static function, which is why the steel inside the PVC-U sash can be dispensed with.

#### **GLAZING WITH POWER**

High-quality triple glazing or functional glazing up to 50 millimetres thick can be used in Kömmerling 76 centre seal windows and doors. Shielded in this way, no heating energy is lost, and the generous windows let in a particularly large amount of solar heat. For sunny prospects all round!

- Centre seal system with high thermal insulation and 76 mm installation depth U<sub>f</sub> value up to 1.0 W/(m<sup>2</sup>K) already included in the standard
- Large range of glazing variants up to 50 mm provide the basis for modern triple glazing or special functional glazing
- > Maximum use of solar heat





## LIVE SAFELY, SLEEP PEACEFULLY

#### SAFETY IN SIGHT

Invitingly beautiful windows, balcony and terrace doors also attract unwanted guests. But you can put a stop to these. Thanks to our clever design, Kömmerling 76 centre seal windows and doors can be effortlessly fitted with burglar-resistant hardware and safety glass. This thwarts burglars because you make it more difficult for them to lever open windows or knock in panes. And you can sit back and relax.

> For windows and doors up to resistance class RC 2 (MC 2)

> Designed for burglar-resistant hardware

## SOUND INSULATION FOR PEACE AND QUIET





## Kömmerling®

Optimal quality of life includes a quiet, low-noise environment – you probably experience it yourself every day. Windows from the Kömmerling 76 centre seal series support you in creating this perfect relaxing environment thanks to innovative sealing technology for the profiles and sound-insulating glass. This way, you can transform your home into an oasis of calm, even when the traffic is roaring by outside.

> Use of sound-insulating panes possible

> Optimum sound insulation of up to 47 dB

## ALL AROUND **A CLASS OF ITS OWN**

We all want a world worth living in, for ourselves and our children - today and in the future. It's good when there are window and door solutions like Kömmerling 76 centre seal. They are designed with longevity, energy efficiency and sustainability in mind, as well as their classic, timeless design, pioneering operating and living comfort and flexible application options.

## **AT A GLANCE**



### Improved designs



### Improved security

#### Improved stability

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



### Improved handling ease

The innovative fittings technology make opening and closing the windows and doors effortless.

### Improved lasting value

The high quality of all components and the use of high-quality, eco friendly plastics in accordance with greenline principles ensure long-lasting solutions. This increases the value of your property in a sustainable way.

### Kömmerling



### Improved thermal insulation



#### Improved sound insulation



### Improved easy care



#### Improved ventilation

## THE BEST CLIMATE FOR YOUR HOME **THANKS INNOVATIVE TECHNOLOGIES**

Kömmerling 76 centre seal has its eye on the future. This window and door system combines the most cutting-edge technologies currently available for PVC-U windows. The flexible modular principle, for example, is groundbreaking. This allows you to put together exactly the window solution that is ideal for you and your budget.

#### **SLENDER DIMENSIONS, QUICK INSTALLATION**

The slim profiles are already innovative, even providing the basis for triple glazing with modern insulating panes. Convenience is a priority: Thanks to intelligent fastening techniques, Kömmerling 76 centre seal elements can be installed quickly, cleanly and without great effort. Replacing old windows can also be done quickly.

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

Even the standard design of Kömmerling 76 centre seal is impressive with an excellent thermal insulation value of U<sub>f</sub> value up to 1.0 W/(m<sup>2</sup>K).

#### HIGH DIMENSIONAL STABILITY

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

#### **GROUNDBREAKING CHAMBER** CONSTRUCTION

The chambers in the PVC-U profile have been developed using the very latest computational methods. The result: High thermal and sound insulation as well as optimum stability of the profile and high load-bearing capacity, even with heavy glass.

#### SAFE FUNCTIONALITY

Kömmerling 76 centre seal can take a lot thanks to its intelligent features. The load-bearing hardware is screwed through several profile walls. Furthermore, there is additional thickness due to special bolting cams in the main load zones.

#### WIDE RANGE OF GLAZING VARIANTS

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

#### FLEXIBLE, CLEAN INSTALLATION

Windows and doors of the Kömmerling 76 centre seal series can be fixed with mounting dowels through steel, with classic fixing brackets or a special dowel chamber in the PVC-U. Installation is quick, clean and safe.

### **Kömmerling**<sup>®</sup>



#### A GREAT DEAL OF DESIGN FREEDOM

Let your imagination run wild. Numerous laminations and aluminium shells, Kömmerling AcrylColor as well as the coating technology proCoverTec offer many creative possibilities.

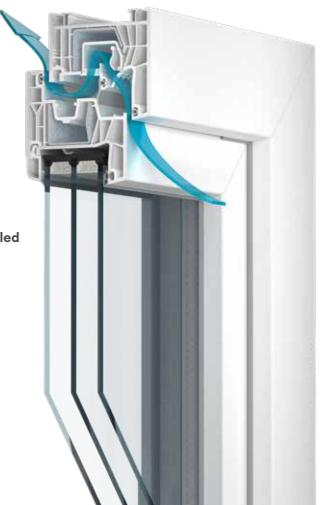
# **AND BREATHE**

## Kömmerling 76 centre seal ClimaTec

Our homes are becoming better and better insulated - in fact both an advantage and a challenge at the same time. This is because inadequate ventilation causes the relative air humidity to rise, creating not only an uncomfortable climate, but also encouraging the growth of mould, which can attack the building fabric, for example. However, if you ventilate too often, you are essentially blowing energy out the window and polluting the environment.

But there is a sustainable way to do it: With ClimaTec from Kömmerling. Even without active ventilation, it ensures a fully automated controlled supply of fresh air with minimal heat loss. And the only thing that takes your breath away is the beautiful view.

- > Self-regulating, easy-to-clean ventilation system
- > Minimises high air humidity and the risk of mould
- > Ensures a controlled supply of fresh air
- > Protects against insects thanks to integrated ventilation grille
- > Almost invisible from the inside and outside, as Kömmerling 76 centre seal ClimaTec is concealed in the outer frame
- > Automatic wind pressure regulation
- > Complies with the German Energy Savings Act
- > Tested sound insulation up to 43 dB (SSK4)
- > Tightness against driving rain and passage of air as per DIN and EU standards
- > Ventilation as per DIN 1946-6





#### **EVEN MORE FUNCTIONS FOR YOUR WELL-BEING**

ClimaTec is concealed in the outer frame rebate and is therefore almost invisible.

#### FOR A PLEASANT CLIMATE IN EVERY WAY

indoor air humidity. This reduces the risk of mould enormously. The wind pressure against driving rain, sound insulation and living space ventilation. Good for you and

Installation fan	Sound t	est value	es in dB*	Passage of air in m³/h				
ClimaTec	A	В	С	2 pairs	4 pairs	5 pairs	7 pairs	8 pairs
250/200	37	41	41	3	4	5	6	6
300/250	37	41	40	3	5	5	7	7
350/300	37	39	39	4	5	6	7	8
350/350	34	37	37	5	7	8	9	10
400/350	34	36	35	5	8	9	10	11
400/400	32	33	33	6	9	10	12	12
1 fan	38	43	43	2	3	4	5	5

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

## LIVE IN COMFORT WITH **A GUARANTEE OF FRESHNESS**

## Kömmerling 76 centre seal ClimaTec Plus

#### WORTH KNOWING FOR PLANNERS AND ARCHITECTS

- > Window rebate ventilators replace the sash overlap seal and are mounted in the upper
- > The number of fans (maximum three) depends on the required air quantity and sound
- ClimaTec Plus.
- > The centre seal in the upper area is notched to the fan length. The innovative flow control

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.		8_001463_PR13 (see GAS: 18_001463_PR14)										
	(Pa)	Air m³/h										
	2	2.2	4.5	5.4	2	3.1	3.3					
	3	2.8	5.5	6.7	2.5	3.9	4.2					
	4	3.3	6.4	7.8	3	4.6	5					
	5	3.7	7.2	8.8	3.4	5.2	5.8					
Air volume flows	6	4.1	8	9.8	3.8	5.8	6.4					
	7	4.5	8.6	10.6	4.1	6.3	7.1					
	8	4.8	9.3	11.4	4.4	6.8	7.7					
	10	5.8	10.4	12.8	5	7.8	8.8					
Tightness against driving rain		Class										
Α		9A	8A	5A	6A	7A	4A					
<b>Pane structure</b> (Window value without fan in dB)		Airborne sound insulation/test value in dB										
<b>4-16-4</b> (24 mm/34 dB)		34	31	29	34	33	32					
<b>8-16-4</b> (28 mm/39 dB)		38	33	31	38	36	35					
<b>12 SI-20-8-SI</b> (40 mm/47 dB)		42	34	32	45	39	37					
<b>8-12-4-12-4</b> (40 mm/40 dB)		39	33	32	40	37	36					
<b>10-14-4-14-6</b> (48 mm/42 dB)		40	33	32	41	37	36					



### **Kömmerling**<sup>®</sup>

## COLOURFUL DIVERSITY, GREAT EFFECT

Windows and doors lend a building a sense of character. Colour of the PVC-U profiles, materials, shapes and sizes – you can play around with them to give your building or your apartment a distinctive touch.

Kömmerling 76 centre seal is a real inspiration for this, whether for new buildings or renovating historic buildings. How about windows that blend seamlessly into the façade design? Or striking solutions that say: "Look, here I am"? All this is possible thanks to a wide range of colour schemes.





#### **ELEGANT WHITE**

PVC-U white is the classical design par excellence, but is also delicate. But Kömmerling 76 centre seal windows and doors are made of high-quality PVC-U, which is characterised by extreme weather resistance. This keeps the smooth, glossy surface of the PVC-U profiles looking beautiful for a long time. Practical for everyday life: The windows and doors are extremely easy to clean.



Vibrant red, delicate blue, elegant dark grey: With laminated solutions, you are spoilt for (colour) choice. However, the plain-coloured versions have one thing in common with the white variants: They are also highly weatherproof and easy to clean.

#### WOOD GRAIN LAMINATION

Lamination with wood grain kills two birds with one stone. They give your home a cosy feeling of a traditional house and yet are multifunctional because the windows are made of durable PVC-U. This saves the need for regular repainting, as is necessary with wooden profiles.



## **ALUMINIUM AND PVC-U: THE PERFECT DOUBLE ACT**



## (ENERGY) EFFICIENCY IN MANY FACETS

nal reliability.



#### 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.

### Kömmerling®

PVC-U and aluminium are the perfect pair in our Kömmerling 76 centre seal window and door. PVC-U is also a permanent fixture in this partnership of materials: On the other side of the profile, it ensures optimum thermal and sound insulation as well as high functio-

Aluminium looks elegant, is extremely weather resistant and robust. At the same time, the material is impressive thanks to its stability and ease of care. With aluminium, you can also really revel in colours. This is because it can be coated with powder finishing in RAL colours or anodised in the shades of your choice. The result is energy-efficient window solutions that are also pleasing to the eye.



#### AddOn

As you like it: On request, your Kömmerling 76 centre seal 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.



## COLOURS WITH A PROTECTIVE EFFECT

## Kömmerling AcrylColor

Kömmerling AcrylColor offers a range of colours and a protective shield at the same time. The principle: Thanks to a heat treatment process, the acrylic is inseparably bonded with the PVC. This ensures that the window profiles remain colourfast for a long time. They also have high scratch resistance, are easy to clean, weather resistant and virtually maintenance-free. Another advantage: Kömmerling AcrylColor profiles are 100% recyclable.



# THE CLEVER FINISHING

proCoverTec

Aesthetically and functionally compelling – that's our unique surface technology proCoverTec through and through. The slightly structured surface results in a pleasant feel. This is extremely tight, homogeneous and therefore very durable. In addition, proCoverTec surfaces are very suitable for all occasions: They protect the PVC-U profiles to the max and reduce 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 finishing. However, one thing is always the same: The satin look of the surfaces has a highly refined effect.



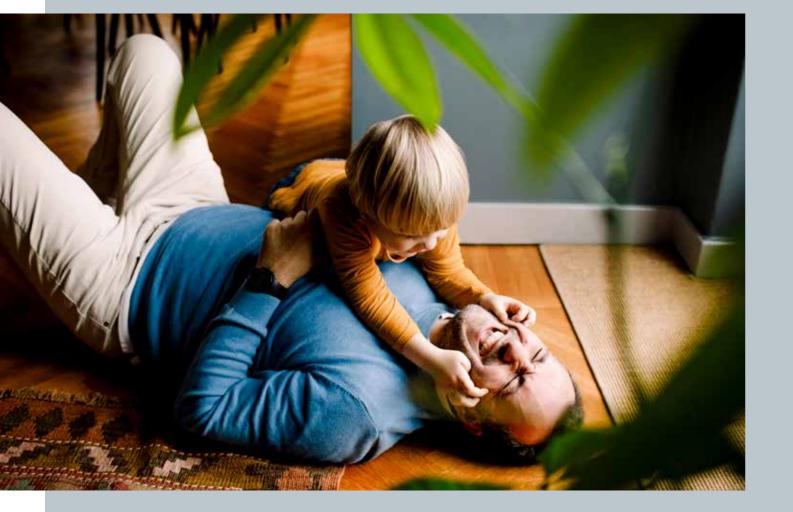
## **AS FLEXIBLE AS** YOUR LIFE

## Residential doors in the same look



#### **AT A GLANCE**

- > Broad product diversity: House, balcony and terrace doors, parallel sliding-tilting doors
- > High burglary protection up to resistance class RC 2 (MC 2)
- > Maximum dimensioned steel reinforcement and welded corner connectors for greater stability
- > Maximum sash sizes: Single-leaf residential door 1200 x 2400 mm Double-leaf residential door 1000 x 2400 mm
- > Use of special functional glazing or commercially available residential door panelling up to 50 mm thickness
- > 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



### **Kömmerling**<sup>®</sup>

#### SAFE AND DECORATIVE

also design to your tastes, provide additional security. As far as the look is concerned, it's up to you: Do you prefer modern functional glazing available in numerous you prefer glazing with LED effect lighting? Patterned glazing? Further alternatives are offered by the extensive prefabricated panelling selection from renowned panelling manufacturers.



- > Optimised use of materials, which therefore saves resources
- > Eco friendly, lead-free stabilisers in PVC-U virgin material with the greenline label
- > A material cycle with proper recycling
- > High contribution towards reducing CO<sub>2</sub> emissions thanks to the high level of thermal insulation. You consume less heating energy, which has clear benefits for the environment

# **CLIMATE** PROTECTION **THAT YOU ENJOY** EVERY DAY

Think about tomorrow today: This is a principle that has guided us in the design and structure of our Kömmerling 76 centre seal window and door system. What does this look like? For example, in carefully considered functions, outstanding insulating values and efficient use of materials. In practice, this means: You can enjoy user-friendly, elegant windows and doors that protect valuable resources.

#### SUSTAINABLE PCV-U WINDOWS: NO LONGER THE STUFF OF DREAMS

All our Kömmerling 76 centre seal windows and doors are made of a PVC-U with the greenline label. 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. And at the end of a life cycle, old windows become components for new windows again. A really round thing.





### **Kömmerling**<sup>®</sup>



## COME ON IN -WELCOME TO A BEAUTIFUL FUTURE

Visions only come to fruition through action. This is exactly what Kömmerling 76 centre seal is designed for, whether you are building or renovating. When you choose these innovative windows and doors, you can look to the future with confidence: You can rely on high quality, longevity of all components and absolute energy efficiency. This not only reduces your costs, but also increases your comfort of living – and even the value of your property. In this way, you create a foundation for future generations that is both sustainable and expandable. Let the future come.





- > High energy savings and cost savings thanks to new highly insulating 76 mm system
- > Improved quality of life thanks to perfect sound insulation
- > Improved security thanks to integrated burglary protection
- > Easy to clean due to robust, weather-resistant surfaces
- > Of lasting value thanks to durable, high-quality design
- > Improved handling ease and reliable functionality through the use of state-of-the-art technology
- > Sustainability thanks to thermal insulation, climate protection and longevity

### **Kömmerling**<sup>®</sup>

## **#KömmerlingForTomorrow**

profine GmbH **Kömmerling** 

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

#### www.koemmerling.com

