



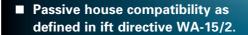
### A NEW ERA OF WINDOWS.

KÖMMERLING 88
Premium centre seal system for windows and doors



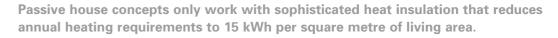
KÖMMERLING standard windows are passive housecompatible.





- Excellent heat insulation values: U<sub>f</sub> value = 0.95 W/(m<sup>2</sup>K) U<sub>w</sub> value up to 0.72 W/(m<sup>2</sup>K).
- Wide range of glazing options up to 58 mm thick, from triple glazing to special functional glazing.
- Foils in wood textures, plain and metallic colours or classic white.

## WHO CAN AFFORD TO SAVE ENERGY?



Even the standard version of KÖMMERLING 88 meets the high heat insulation requirements for passive houses when fitted with functional glazing. It enables everyone to make a valuable yet affordable contribution to reducing CO<sub>2</sub> levels.

Versions with even better insulation properties are also available, e.g. with proEnergyTec. In other words, KÖMMERLING 88 makes zero-energy and plus-energy buildings possible.



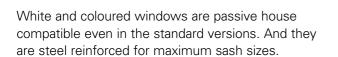
# WHY IS EVERY TENTH OF A U VALUE IMPORTANT?

It's decisive to energy efficiency and climate protection.

It's often the small details that make the biggest difference. Especially in the case of a window's U<sub>f</sub> value. The lower the value, the better. And the numbers behind the decimal point also count. They may just be tenths or hundredths of a whole value, but they make a big difference. KÖMMERLING 88 delivers impressive energy and heating cost savings.

The unique proposition: KÖMMERLING 88 achieves these savings with maximum sash and window pane dimensions because unlike other systems KÖMMERLING 88 doesn't have to reduce steel reinforcement components to improve heat insulation performance. It's a unique design advantage.







Even higher heat insulation values can be achieved with integrated insulating parts.



The highest heat insulation values are achieved if the frame and sash are filled with proEnergyTec foam.

# WHAT DO YOU GET FROM YOUR FUTURE WINDOW?

Benefits of KÖMMERLING 88 premium window system.



#### More design

Streamlined and linear profiles in a wide range of colours with plain coloured, metallic, wood texture or aluminium facing shells.



#### More heat insulation

KÖMMERLING 88 makes the passive house window its standard. Versions with even better insulation properties are also available, e.g. with proEnergyTec.



#### More soundproofing

Excellent noise protection with high quality functional glass panes.



#### More security

Perfect for incorporation of security fittings and anti-burglary features.



#### More flexibility

KÖMMERLING 88 is the complete window and door system based on a modular concept and efficient upgrade technologies, so it can be flexibly adapted to your requirements.



#### More ease of maintenance

High-quality surfaces that are incredibly easy to clean.



#### More value

Durable quality and eco-friendly PVCs sustainably enhance your property's value.



#### More stability

Optimally dimensioned steel reinforcements provide perfect window statics. With AluClip Pro the aluminium facing shell performs the function of steel reinforcements.



#### More tightness

3 seal levels and the innovative rebate gaskets keep draughts, dust and rain out, and deliver optimum heat insulation.



#### More ventilation

KÖMMERLING has an optimised ventilation programme to ensure the perfect indoor climate.



#### 88 mm installation depth

Perfect for new buildings and for buildings with sophisticated architecture or energy concepts.



#### More ease of operation

Designed to incorporate the very latest fittings technology for easy opening and closing. Concealed fittings are also possible to meet the highest requirements of aesthetics.



## THE INTERIOR VALUES.

KÖMMERLING 88
The details of the window system.

You can't see the technology inside a window just by looking at it. To reveal it, you have to look inside the profile. KÖMMERLING 88 technology is the most advanced window technology available. The innovative multi-chamber design, three seal levels, optimised stability and upgrade technologies such as proEnergyTec are just a few impressive examples of the innovative features incorporated in the new system.



1

#### High functional reliability

The maximum-dimensioned steel reinforcements guarantee high functional reliability and enable the windows to be used for window walls and wing doors of up to 2.5 m in height.

Perfect multi-chamber design



Glazing options

The deep glass rebate permits the use of triple glazing, special functional glass or balustrade panels up to 58 mm thick.



4

#### Seals

The profile geometries are

designed with optimum isothermal
characteristics, calculated with the
latest methods, for outstanding heat
insulation and soundproofing
values, and optimum profile
stability.

The three se
centre gaske
sash rebate excellent pro
rain, optimum
outstanding

The three seal levels – with a centre gasket – and the innovative sash rebate gasket guarantee excellent protection against impact rain, optimum windproofing and outstanding soundproofing.

5

#### **Professional installation**

The windows can be installed with steel dowel pins, classic mounting anchors or with a dowel chamber and a special patented dowel adapter.

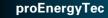


Inserted insulating parts

The heat insulation values satisfy passive house requirements and can be further enhanced with additional insulating parts – without any detrimental effect on the statics for large sashes and glass surfaces.

#### Securely mounted fittings

The load bearing parts with several profile walls and additional thickening are connected with special screw pins in the main load bearing zones.



Special techniques that ensure high torsional rigidity make it possible to dispense with the steel reinforcements inside the window. The reinforcement chambers are filled with proEnergyTec foam

to achieve the very highest heat insulation values.



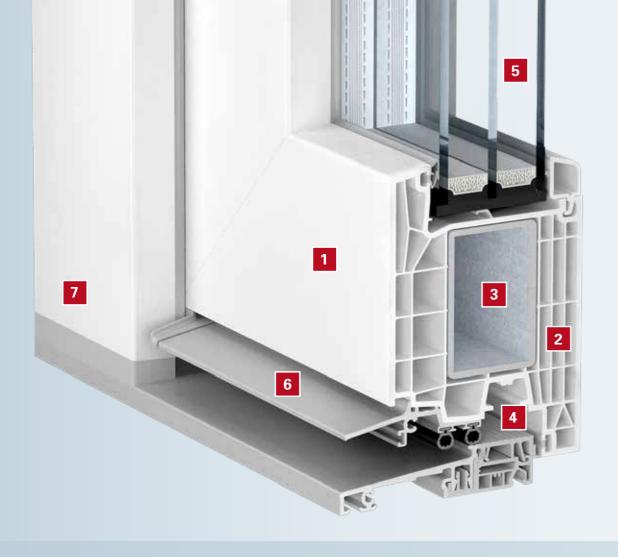


# YOUR EXCLUSIVE DOOR.

For enhanced security and energy efficiency.

The KÖMMERLING 88 range also includes front doors, side doors, balcony and patio doors and parallel side-and-tilt doors. It's a one-stop opportunity to harmonise design and technology.

The KÖMMERLING 88 residential doors add a distinctive feature to your home and offers maximum intrusion protection for your safety and security. Diverse surface, colour, decorative and functional glazing options, door panels and additional features ensure that your future guests will feel welcome whenever they walk through a KÖMMERLING 88 door.



### READY FOR FUTURE TECHNOLOGY.

KÖMMERLING 88
The details of the door system.

KÖMMERLING 88 door systems incorporate many special technical features. They guarantee high security, excellent heat insulation, outstanding soundproofing and very stable statics. A KÖMMERLING 88 door is always the right choice.



1

#### Attractive design

Linear, recessed design with the perfect profile proportions.



High functional reliability

The maximally dimensioned steel reinforcements and welded corner connecters guarantee reliable function and higher static stability.



5

#### **Glazing options**

The deep glass rebate permits the use of triple glazing, special functional glass or door panels up to 58 mm thick.



7

#### **Professional connection**

The threshold connectors ensure perfect fit and a tight seal between the frame and the threshold.

sure

2

#### Perfect multi-chamber construction

The profile geometries are designed with optimum isothermal characteristics, calculated with the latest methods, for outstanding heat insulation and soundproofing values and optimum profile stability.

4

#### Seals

Double seals and barrier-free thresholds with thermal break ensure a perfectly tight fit.



6

#### For extreme installation situations

Aluminium weather boards and a rebate pad set provide additional protection against driving rain.



Variability

The inward and outward opening residential door system is optionally available with aluminium facing shells.



# THE BEST OF TWO WORLDS.

If you prefer the look of aluminium but don't want to do without the excellent heat insulation and soundproofing properties of PVC, we've got just the thing for you! KÖMMERLING 88 unites the advantages of both materials. AluClip, AluClip Pro and AddOn are the three innovative material combination options.





#### **AluClip**

The aluminium facing shell combines elegant aluminium design with an almost unlimited choice of colours and the optimum heat insulating values of the modern KÖMMERLING 88 PVC profile system.



#### **AluClip Pro**

The aluminium facing shell, AluClip Pro performs the static function that is usually achieved with a steel reinforcement inside the sash profile. So, with AluClip Pro, you don't need that steel reinforcement. This also improves the window's heat insulation properties.



#### AddOn

The AddOn aluminium interconnecting frame has a modern design with optional shutter system and sunshade. This provides maximum integrated comfort and convenience, and the additional glass pane improves heat insulation and soundproofing.





## IT DOESN'T HAVE TO BE WHITE.

KÖMMERLING 88 offers you many different design options.

In the future, there will be a vast diversity of architectural styles. KÖMMERLING 88 offers outstanding creative freedom to design homes that reflect your personal preferences. Aesthetic lines and exclusive-looking materials – plus the new window systems – permit the incorporation of both modern and classic features to give the building its own unique character. There are many fascinating surfaces available for both white and coloured window profiles.

The entire foil range offers a choice between wood textures, plain or metallic colours on the outside – with neutral white on the inside – or foil on both sides.



Classic white

Wood texture



Plain colours



Metallic colours



- Intelligent, self-regulating ventilation system without power source.
- Minimises air moisture levels to reduce the risk of mould forming.
- Promotes controlled air exchange.
- Ventilation grilles prevent insects getting inside.
- Conforms to the German Energy Conservation Ordinance requirements (EnEV).
- Impact rainproofness and air penetration compliant with DIN and EU standards.
- Ventilation in compliance with the DIN 1946-6 standard.



### LET FRESH AIR INTO YOUR LIFE.

#### KÖMMERLING 88. The feel-good window.

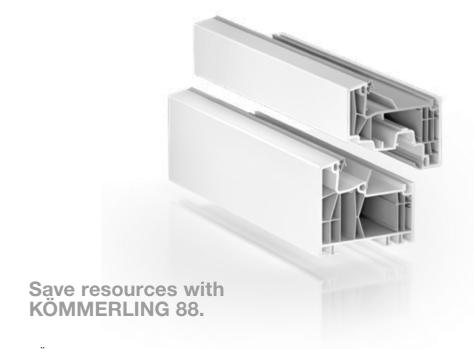
In the future, buildings will be highly insulated to consume less energy and protect the climate. But with insulated living spaces, the right ventilation is essential to keep the humidity in the right balance and thus prevent the risk of mold growth. At the same time, ventilation must minimize heat loss. KÖMMERLING ventilation systems offer you an intelligent, fully automatic ventilation solution.

The ventilation mechanism is concealed in the frame rebate and is hardly visible, but all the more effective: it ensures controlled air exchange without manual ventilation and requires no power source.

The KÖMMERLING ventilation systems also feature automatic wind pressure adjustment and of course meet the requirements of the German Energy Saving Ordinance (EnEV) as well as the DIN and EU standards for driving rain tightness, sound insulation and ventilation of living spaces.







KÖMMERLING 88 – the window of the future. It's the responsible and forward-looking choice: maximum energy savings, durable quality and sustainable production are all factors that help you make your own personal contribution to environmental protection and the conservation of natural resources. At the same time, KÖMMERLING 88 enhances the value of your property, and keeps your family safe and comfortable.







- Make a personal contribution to reducing CO<sub>2</sub> emissions with products that deliver passive house heat insulation in the standard version.
- Optimised and therefore resource-conserving material use
- Eco-friendly, lead-free stabilisers with the greenline label
- Closed material loop through professional recycling

### <u>greenline</u>

KÖMMERLING 88 has such an advanced design, based on computer and simulation technology, that with optimal material use, it achieves maximum insulation values and functions very reliably. Furthermore, absolutely no lead has been used to stabilise the PVC. Instead, an environmentally friendly calcium-zinc based stabiliser has been used. When the proEnergyTec profiles are filled with foam, only green propellants are used. The foam and PVC can also be cleanly separated from each other for recycling. And, on the subject of recycling: at the end of the product lifecycle, we make components for new windows from old ones. This recycling initiative ensures a sustainable closed-loop material cycle.

#### **profine GmbH** KÖMMERLING KUNSTSTOFFE

Postfach 2165 · 66929 Pirmasens · Germany Phone +49 6331 56-0 · Fax +49 6331 56-2475 E-mail: info@koemmerling.de Internet: www.koemmerling.de

