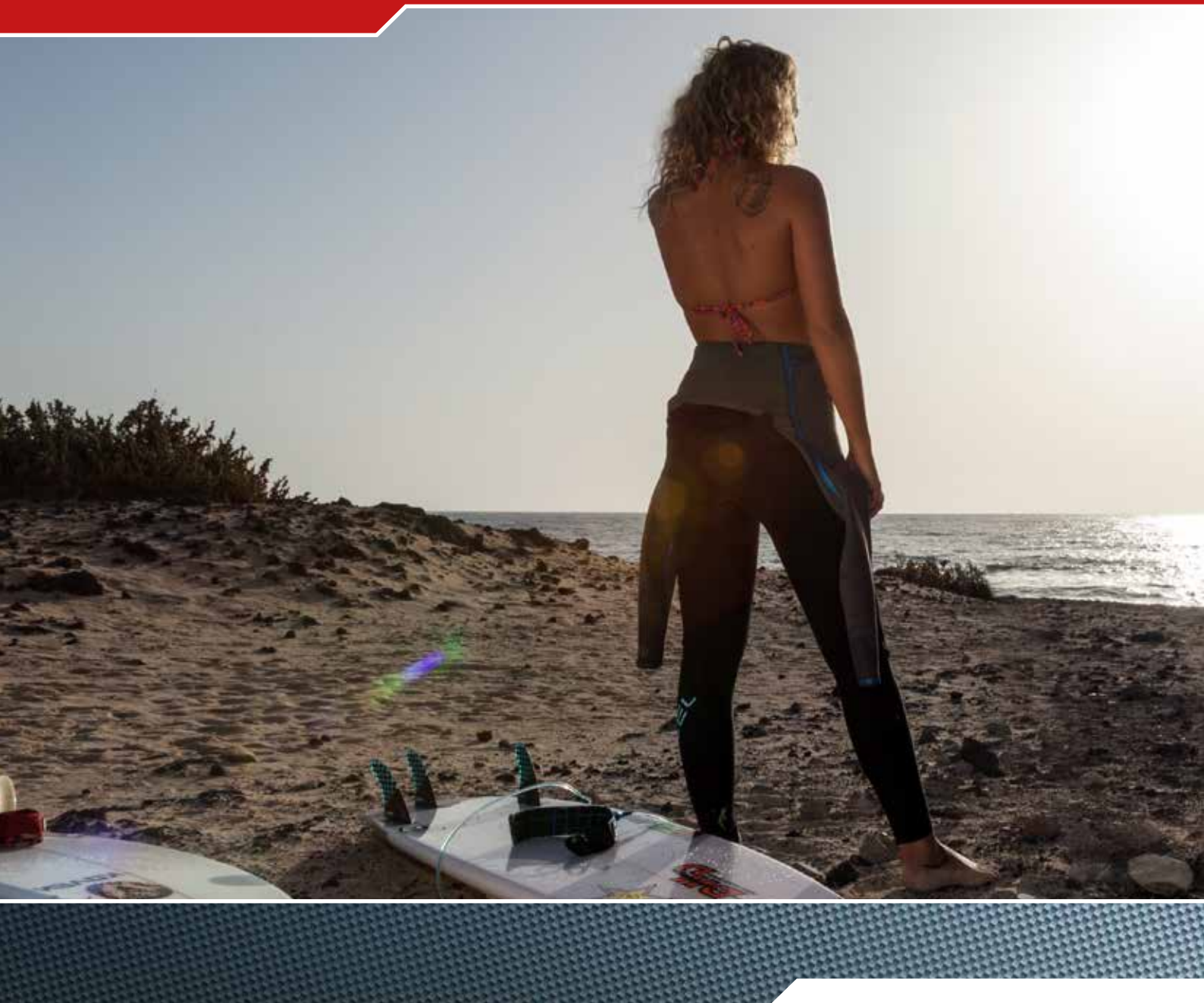


No compromises on windows and doors



KBE 88 Centre Seal System







***Ground-breaking
in every respect:***

KBE 88

To improve technology you have to focus on the details. That's what we did with our new KBE 88 window and door system. We've managed to develop a passive house window that has outstanding insulation properties as a standard feature – with no need for further optimisation. There are no static restrictions whatsoever, so very generously dimensioned windows are also possible. KBE 88 comes in classic white plus many other colours, adding individual flair to passive house concepts.

- » **Even the standard version conforms to passive house requirements**
- » **Suitable for versatile applications in diverse building types**
- » **Progressive, state-of-the-art window technology**
- » **Sustainable design**



Make your dreams come true

Future architectural designs will feature generously dimensioned windows to create light and welcoming living and working spaces. The KBE 88 premium window system is perfect for very high buildings with static loads.

KBE 88 was designed for future sustainability. Its energy efficiency and sound insulation values are already significantly better than comparable systems. Anyone who installs a KBE 88 window system today will meet all technical requirements for many years to come.



KBE 88 has three seal levels with a centre seal in the frame, providing reliable impact rain protection and permanent windproofing. The innovative rebate gasket additionally contributes to KBE 88's excellent heat insulation properties.

- » Premium window and residential door system with 88 mm installation depth
- » High-insulating 7-chamber construction with centre seal
- » Simple and linear design for triple glazing up to 58 mm thick
- » Closed window walls up to 2.5 m high

High-end technology that everyone can afford

Even the standard version of KBE 88 meets the high heat insulation requirements for passive houses when fitted with functional glazing. It enables anyone to make a valuable yet affordable contribution to reducing CO₂ levels.

The smaller the U-value, the better

Passive houses only work with sophisticated heat insulation concepts that reduce annual heating requirements to 15 kWh per square metre of living area. The most important elements are the windows. KBE 88's excellent heat insulation properties enable the building to derive heat from passive energy sources such as body warmth or indoor solar energy gains. The U_w value is used to make an objective comparison of different windows' insulating performance. The smaller the value the better the window's insulating properties are. So the KBE 88's minimal U_w values mean maximum energy savings for you.

» **Passive house compatibility as defined in ift directive WA-15/2**

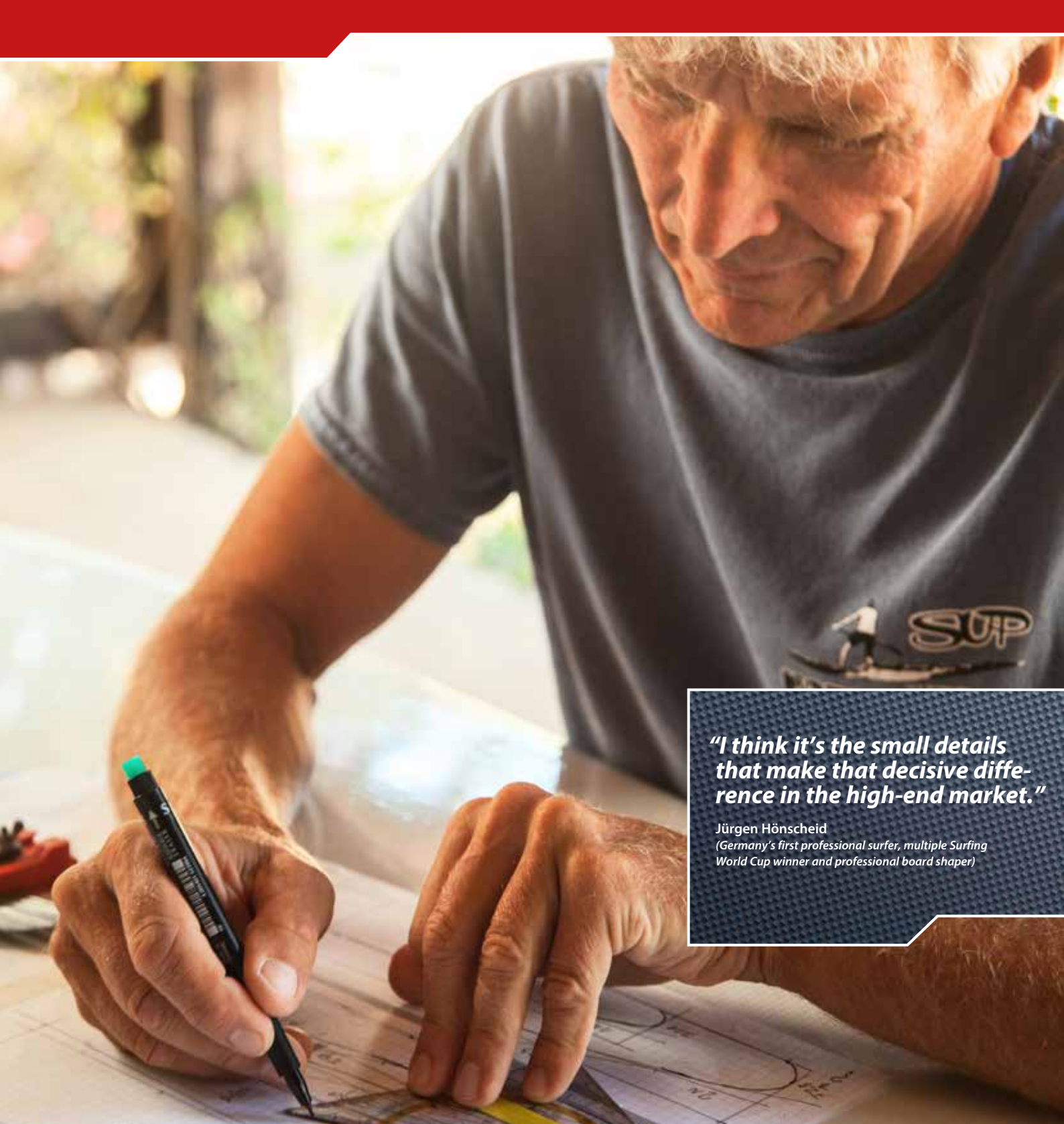
» **Excellent heat insulation values:**

U_f value = 0.95 W/(m²K)

U_w value up to 0.72 W/(m²K)

» **Wide range of glazing options up to 58 mm thick, from triple glazing to special functional glazing**

» **Foils in wood texture, plain and metallic colours or classic white**



***"I think it's the small details
that make that decisive difference
in the high-end market."***

Jürgen Hönscheid
(Germany's first professional surfer, multiple Surfing
World Cup winner and professional board shaper)



Why is every tenth of a u-value so 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_f 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. KBE 88 delivers impressive energy and heating cost savings.

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



White and coloured windows are passive house compatible even in the standard versions. And they are steel reinforced for maximum sash sizes.

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

KBE proStratoTec

**Der glasfaserverstärkte Kunststoff,
der Stahl überflüssig macht**



Steel reinforcements have always played an important part in the production of PVC windows. The new proStratoTec technology replaces steel with fibreglass-reinforced plastic, thereby making it redundant. Using an innovative tri-extrusion process, PVC virgin material, regrind and fibreglass-reinforced plastic are extruded at the same time to form a single window profile.

The benefit for you: Thanks to the superior thermal insulation, passive house windows in accordance with the Dr Feist Passive House Institute are now a reality. Sashes equipped with proStratoTec are available in the KBE 88 double and centre seal systems.

» Passive house windows now available in colour

Passive house certification in accordance with the Dr Feist Passive House Institute.

» Weight reduction

Weighs approx. 25% less compared to sashes with steel

» Thermal insulation value

$U_f = 0.79 \text{ W}/(\text{m}^2\text{K})$
Improved insulating value as no steel is used

» Standardised manufacture

No additional steps required

» Sustainability

Intelligent recycling process.
All of the materials are reused





First-rate soundproofing

Enjoy peace and quiet with KBE 88. The high level of soundproofing excludes annoying noises, even when the building is located on a busy street. This is achieved with a 7-chamber design and a large reinforcement chamber in the profile, innovative seal technology, soundproof glazing and professional installation.



» Can be fitted with soundproof glass in a thickness of up to 58 mm

» Satisfies the highest soundproofing requirements



Effective protection against intruders

Burglary figures continue to rise dramatically. KBE 88 has anti-burglary fittings for the effective protection of you and your family. The system is designed for simple and cost-effective adaptation to your individual security needs.

- » For windows up to resistance class RC 3 (WK 3)
- » Anti-burglary fittings can be used



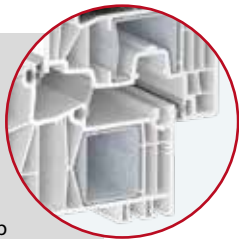




1

» **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.



3

» **Glazing options**

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



2

» **Perfect multi-chamber design**

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



4

» **Seals**

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



What makes KBE 88 special

You can't see the technology inside a window. To reveal it, you have to look inside the profile. - KBE 88's technology is the most advanced window technology available. It has an innovative multi-chamber design, three seal levels and optimised stability. These are just a few impressive examples of the innovative features incorporated in the new system.

5

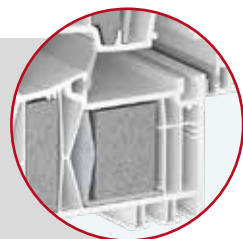
» Professional installation

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 pane surfaces.



6

» 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.





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 KBE 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 frame. 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 between the panes. This provides maximum integrated comfort and convenience, and the additional glass pane improves heat insulation and soundproofing.

The pioneering combination of aluminium and PVC

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! KBE 88 unites the advantages of both materials. AluClip, AluClip Pro and AddOn are the three innovative material combination options.

It doesn't always have to be white

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



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



Classic white



Plain colours



Wood texture



Metallic colours

KBE 88 door system



Great technology and design

The KBE 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.



- » Excellent intruder resistance
- » Highest insulation values
- » Various surfaces
- » Large range of colours
- » Decorative and functional glazing
- » Numerous door panel options
- » Additional features
- » Maximum sash size 1,200 x 2,400 mm



1

» **Attractive design**

Linear, recessed design with the ideal proportions.



3

» **High functional reliability**

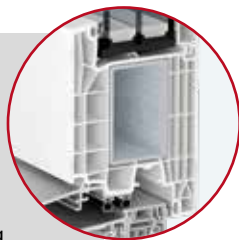
The maximally dimensioned steel reinforcements and welded corner connectors guarantee reliable function and higher static stability.



2

» **Perfect multi-chamber construction**

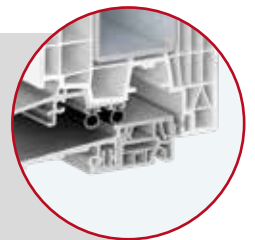
The profile geometries are designed with optimum isothermal characteristics, calculated with the latest methods resulting in outstanding heat insulation and soundproofing values and optimum profile stability.



4

» **Seals**

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



Our leading door concept

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

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

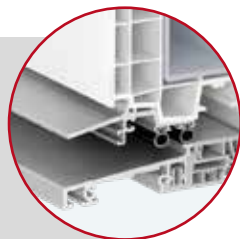
The threshold connectors ensure perfect fit and a tight seal between the frame and the threshold.



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.



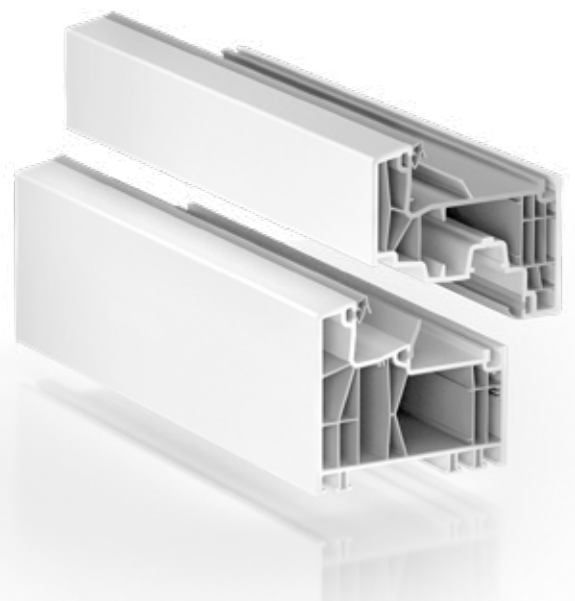


Advancing sustainability

greenline 

KBE 88 has such an advanced design that with optimal material use it achieves maximum insulation values and functions very reliably. Also, absolutely no lead has been used to stabilise the plastic. Instead, an environmentally friendly calcium-zinc based stabiliser has been used.

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.





- » Make a personal contribution to reducing CO₂ 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



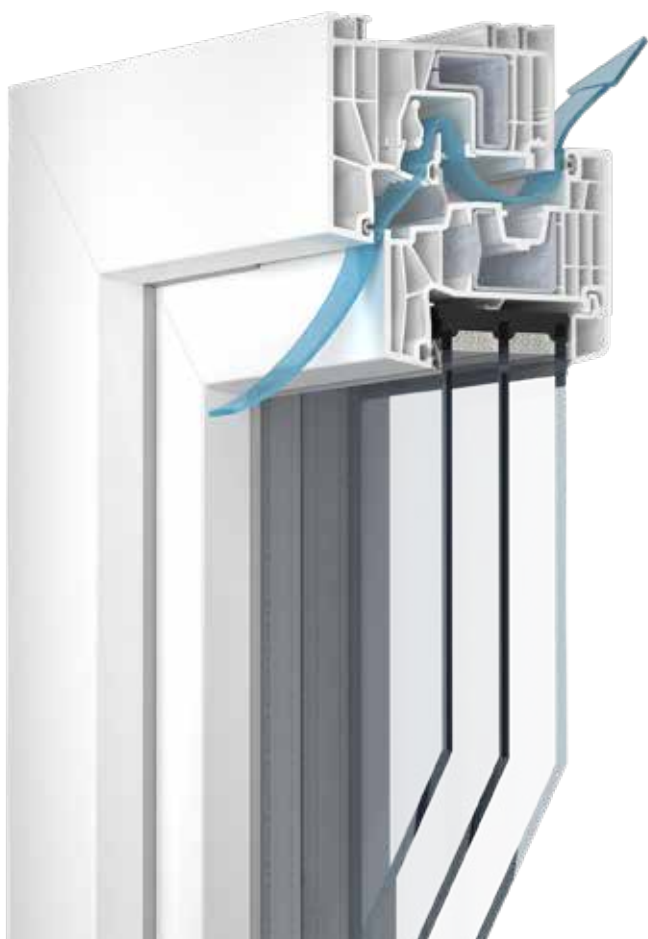


Tädd

Automatic, power-free ventilation

Buildings will be highly insulated in the future so that they use less energy and protect the climate. But when you have a highly insulated living environment, you need the right ventilation to sustain the perfect air moisture level balance and prevent mould from forming. At the same time, the ventilation has to minimise heat losses.

ClimaTec 88 by KBE is an intelligent, fully automated ventilation solution. The ventilation mechanism is concealed in the frame rebate where it is barely visible, yet extremely effective. It ensures controlled air exchange without the need for manual ventilation or a power source. The ClimaTec 88 ventilation system also has an automatic wind pressure adaptation mechanism and complies with the German Energy Conservation Ordinance (EnEV) requirements as well as DIN and EU standards on impact rainproofness, soundproofing and room ventilation.



- » Intelligent, self-regulating ventilation system without power source
- » Minimises air moisture levels to reduce the risk of mould forming
- » Facilitates controlled air exchange
- » Ventilation grilles prevent insects getting inside
- » Conforms to the German Energy Conservation Ordinance requirements
- » Impact rainproofness and air penetration compliant with DIN and EU standards

An overview of KBE 88



Outstanding heat insulation

KBE 88 makes passive house windows standard technology.



Outstanding soundproofing

Excellent noise protection with high quality functional glass panes.



Outstanding design

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



Outstanding intrusion protection

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



Outstanding flexibility

KBE 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.



Outstanding tightness

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

88



Outstanding care properties

Easy-to-clean, high quality surfaces.



Outstanding value stability

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



Outstanding convenience in use

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.



88 mm installation depth

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



Outstanding ventilation

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



Outstanding stability

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



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