



KÖMMERLING®



ADVANTAGES & QUALITIES OF PVC-U WINDOW SYSTEMS

KÖMMERLING PREMIUM WINDOWS

Nowadays, windows are the decisive factor when it comes to a building's comfort, cost and also its appearance.

PVC-U window systems became immediately popular on account of their long service life and easy maintenance. For the first time, there was an ideal material which is 100% rotproof. KÖMMERLING has played a pioneering role in developing and marketing window systems since 1967. Today it has operations in all parts of the world. Most countries have their own quality standards and guidelines. KÖMMERLING PVC-U window and door

systems have been independently tested for performance and quality throughout the world. They meet, and often substantially surpass, the requirements of relevant standards for PVC-U windows worldwide.

This technical excellence, independently substantiated and proven over many years of service in climates ranging from Arctic extremes to Mediterranean and equatorial conditions, means that KÖMMERLING products can confidently be specified to meet the most rigorous requirements of prolonged exposure and use.

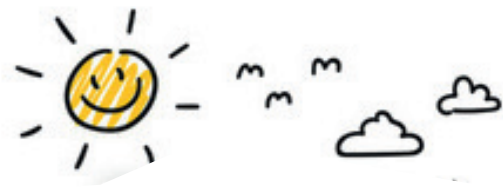


BEAUTY & DESIGN

KÖMMERLING PVC-U window systems offer the most varied styles and designs. The technical limitations of the past have been overcome and today's KÖMMERLING PVC-U window and door profiles can be fitted into any type of property from residential houses and apartments to commercial buildings such as hotels, hospitals and modern office blocks.

With their great versatility, the KÖMMERLING PVC-U window and door systems will satisfy any taste in style and design and have proven to be the best material even for the restoration of historical buildings.





WEATHER RESISTANCE

More than any other building material, PVC-U windows and doors made of KÖMMERLING profiles keep their excellent material properties even after many years in use. As a matter of fact, they do not alter under extreme temperature or weathering. Thanks to the KÖMMERLING-owned material compound of the PVC-U profiles, they show no negative effects caused by heavy rain, snow, strong sun or smog. They do not rot, corrode nor warp and even after many years, the windows are still attractive, perfectly tight and working well.

MAXIMUM WIND RESISTANCE

Due to their excellent material properties, KÖMMERLING PVC-U window and door systems are ideal for being installed in buildings close to the sea where they are permanently exposed to strong wind, heavy rain and salty air. The windows have passed several severe tests by official institutions. All window types are capable of withstanding the tests specified in European Standards EN 12207, EN 12208 and EN 12210 (wind, water and structural requirements of PVC-U windows).



LONG LIFE

Thanks to modern technology, KÖMMERLING PVC-U window and door profiles will practically last forever. For this reason, they are an excellent investment for your home as they do not involve any future maintenance costs. Furthermore, combined with modern thermal insulation glass, KÖMMERLING profiles will help to achieve a sustainable energy saving effect and are, therefore, an even better investment.



MAINTENANCE FREE

KÖMMERLING PVC-U window and door systems do not require regular repainting and expensive maintenance. They do not rot, warp nor corrode even in tropical and salty coastal climates. Therefore, their maintenance is reduced to simple cleaning and does not involve any further costs.



TERMITE RESISTANCE

In tropical climates wooden windows and doors are often destroyed by termites, whereas PVC-U window and door systems are fully resistant to these insects. Thanks to the highly developed KÖMMERLING material compound of PVC-U windows and doors, termites are not able to attack the PVC-U profiles.

EFFICIENT THERMAL INSULATION

No matter in which climate KÖMMERLING windows and doors are installed – they contribute to a cosy and comfortable atmosphere in your home. As the design of the KÖMMERLING system prevents thermal bridging, the thermal insulating performance of the finished window is exceptionally good.

The glazing is also of utmost importance for good thermal values, also contributing to a substantial energy saving. Window and door systems from KÖMMERLING eliminate the problem of water condensation on the window panes inside the house. In official tests, the KÖMMERLING window profiles easily passed the tests for frame materials with highest thermal insulation according to EN ISO 10077.



HIGH SOUND INSULATION

High-stability window and door profiles made of PVC-U offer the best solution for increased safety. Special fittings and glazing, qualified window fabrication and expert installation offer an enhanced security at various levels. For this reason, KÖMMERLING window frames and door panels are always internally beaded.



MAXIMUM WATER TIGHTNESS

KÖMMERLING PVC-U window and door systems have been successfully used in swimming-pools, marine and ocean environments without detriment to the surface finish or performance. One of the main assets of KÖMMERLING window and door systems is their resistance to driving rain and their joint tightness. KÖMMERLING PVC-U profiles fulfil the demands of EN 12208 (Resistance to driving rain). All window types are designed to be watertight when tested up to 300 PA as specified in BS 6375: Performance of Windows Part 1, 1989: Classification for weather tightness. Some types achieve a 600 PA rating.





PROTECTION AGAINST BURGLARY

High-stability window and door profiles made of PVC-U offer the best solution for increased safety. Special fittings and glazing, qualified window fabrication and expert installation offer an enhanced security at various levels. For this reason, KÖMMERLING window frames and door panels are always internally beaded.



BEHAVIOUR IN CASE OF FIRE

Fire tests have shown that KÖMMERLING PVC-U materials, being naturally flame retardant throughout their product life, will not cause, support or enhance the development of accidental fire. Unlike timber windows, the PVC-U sections do not support combustion and are in fact self-extinguishing. This quality prevents the promotion of fire spread. For this reason, KÖMMERLING window systems offer considerable fire protection. The special profile compound possesses a fire-retardant rating according to DIN 4102. It also fulfils Class 1 fire resistance (i.e. most resistant) as defined in BS (British Standards) 476: Part 7. Therefore, KÖMMERLING profiles are an effective means for preventive fire protection.





MATERIAL & STRUCTURAL PERFORMANCE

The high performance compound used and developed exclusively by KÖMMERLING is KÖMALIT Z. The longevity and superior quality of this material has been conclusively proved for almost 40 years. The KÖMMERLING- own material compound performs to worldwide standards for strength, durability, heat stability, colour retention, and termite resistance. KÖMALIT Z in fact significantly exceeds the stringent requirements of the highest classification of DIN standard 77498 for impact resistance. This fact provides an additional margin of safety to the quality of the product and enables the profiles to be fitted even in highrise buildings.



ENVIRONMENTAL ADVANTAGES

The extrusion process of PVC-U window and door profiles is relatively energy efficient, compared with other materials such as aluminium. Another benefit: Where PVC-U has been specified as an alternative to wood, the rate of consumption of forests is slowed. PVC-U profiles are environmentally friendly as they can be fully recycled and reused for the production of PVC-U profiles. For several years now, all KÖMMERLING window and door profiles have been solely produced with calcium-zinc instead of lead. Calcium-zinc is a new type of stabiliser that makes PVC-U profiles even more resistant to the most aggressive weather conditions.