

The solution for high-quality powdercoated windows and doors

insulbar with ESPOC



Perfect coating and improved appearance

With ESPOC, Ensinger has developed an innovative solution that opens up new design possibilities for window and door systems. ESPOC is an extremely thin coating that is applied to our standard profiles or to customer-specific profile designs using a special process.

Even on the most challenging insulbar profiles with multiple visible sides, protrusions and undercuts, our innovation enables a virtually perfect powder coating of our customers' systems.

In combination with our insulbar REG, insulbar RE, insulbar LI and insulbar RE-LI products, this results in high-quality, highly insulating and sustainable window and door systems – for maximum design freedom and the highest quality.

How does it work?

The surface is made electrically conductive using an innovative process. The electrostatically charged powder particles are attracted to the earthed surface of the insulating profile in a similar way to the attraction of conductive metals. This means that both aluminium-plastic assembled profiles and solitary PA profiles can be optimally coated, resulting in an outstanding appearance in both cases.



ESPOC quick guide



Watch the ESPOC video

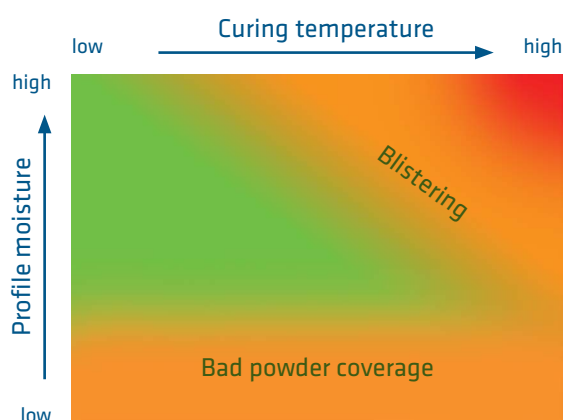




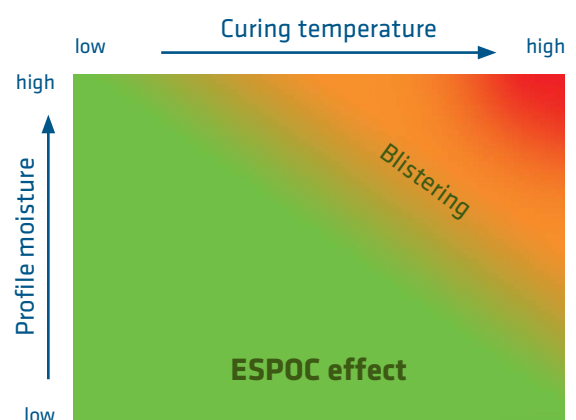
What is the ESPOC effect?

The ESPOC effect works by attracting powder exceptionally well – especially on dry insulbar profiles. The insulating bars are made of hygroscopic polyamide, which absorbs moisture from the ambient air over time. This moisture can lead to the formation of vapour bubbles during the baking of the powder coating – a phenomenon known as blistering. To avoid this and achieve a perfect powder coating result, we recommend using dry or pre-dried insulbar profiles.

Without ESPOC coating



With ESPOC effect



Advantages at a glance

Optics

- High-quality appearance in the profile system
- Perfect coating result possible

Process improvement

- Safer and improved powder coating process
- Lower reject rate
- Improved paint adhesion
- High attraction in the powder coating process in assembled or solitary profiles

Flexibility

- Applicable to existing or new standard and customised profiles
- Can be applied to many insulbar materials
- Available as an option

Further advantages

- New and greater degrees of freedom in the design of visible insulating profiles
- Unchanged thermal conductivity of the base profile
- Consistent mechanical properties

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The Ensinger Group is engaged in the development, manufacture and sale of compounds, semi-finished materials, composites, technical parts and profiles made of engineering and high-performance plastics. To process the thermoplastic polymers, Ensinger uses a wide range of production techniques, such as extrusion, machining, injection moulding, casting, sintering and pressing. With a total of more than 2,500 employees at over 30 locations, the family-owned enterprise is represented worldwide in all major industrial regions with manufacturing facilities or sales offices.