TECHNOFORM

Handling instructions

Blistering and foaming of polyamide-based insulating strips

Insulation solutions for windows, doors, and facades

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Handling instructions

Blistering and foaming of polyamide-based insulating strips

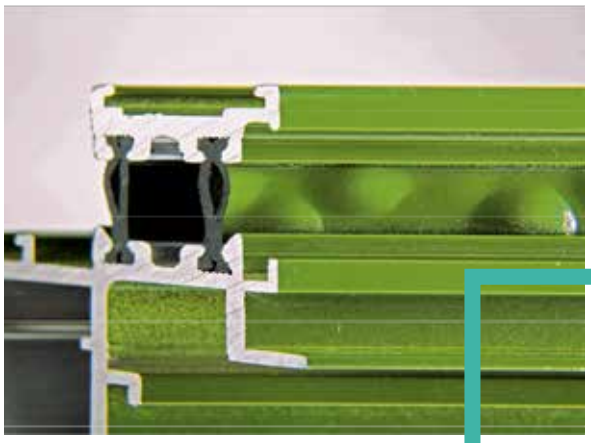
Problem statement:
Polyamide is a hydrophilic thermoplastic which absorbs moisture from the environment in the course of time. The rate and degree of moisture-absorption is dependent on the ambient temperature and ambient humidity.

If a polyamide-based insulating strip is subjected to extreme temperatures after having absorbed moisture, this moisture is converted into the vapour phase. This change of state is accompanied by an increase in volume, which can result in blistering or foaming of the insulating strip.

This is dependent on the combined action of two parameters (temperature and moisture content):
Our experience has shown that "conventional" moisture contents resulting from absorption from air during storage of strips/assembled profiles allow object temperatures of 180 °C to 200 °C and dwell times of approx. 20 minutes during the baking of powder coatings.

To prevent blistering and foaming of polyamide-based insulating strips, please ensure the following:

- dry storage of insulating strips and of untreated assembled profiles (Rainwater, condensation etc. which has been collected on the insulating strips will be absorbed by the strips thereby increasing the normal storage moisture level.)
- thorough drainage of assembled profiles following pre-treatment and anodization (residual water is absorbed more rapidly by the insulating strip during baking as a result of the oven temperatures and thus increases the normal storage moisture level.)
- uniform temperature in drying and baking ovens (depending on oven type and location of temperature sensor, the temperature of the injected air can significantly exceed the selected oven temperature. Please observe the appropriate object temperature for the various shell weights.)



Blistering/Foaming on the insulating strips

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