

TECHNICAL REPORT

TEXTURED FRONTSHEET

The new texture is created during panel manufacturing by using a complex multilayer structure. The outer layer is made of ECTFE, one of the best polymer in term of resistance to weathering and abrasion.

Comparing the new front sheet with the traditional smooth one, the thickness increases from 0.4mm to 0.6mm.

However, we found that it retains the same light transmission, thanks to the high optical properties of the material. The results show an unchanged efficiency compared to standard modules, as well as resistance to impacts according IEC 61215.

Advantages:

- better grip,
- increased resistance to scratches, bumps and trampling,
- better light capture at low incidence angles.

Drawbacks:

- slight increase of the panel weight
- higher manufacturing cost.

Actually, the last point is not an issue for customers, because Solbian decided to keep the same price for the premium SP series with the new front.

