

LightSwitch™ ETFE Frontsheet

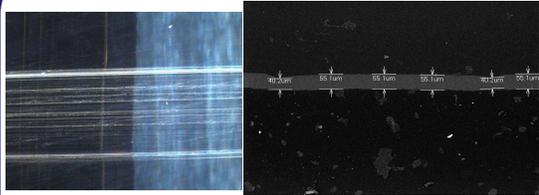
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Cut Resistance, with EVA

IEC/UL standard testing

ETFE integrity and electrical resistance maintained



Optical microscope top view of cut test track on ETFE surface (50µ ETFE, over 0.45mm EVA on a steel substrate)

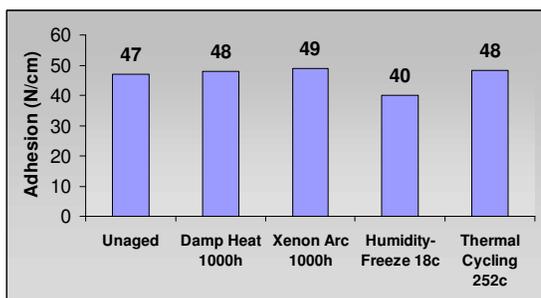
SEM cross section of cut track with ETFE thickness variation

Introduction

- LightSwitch™ ETFE is a fluoropolymer film from Saint-Gobain Performance Plastics
- Physical properties are ideal for a photovoltaic module frontsheet
- Properties are stable in standard climate conditioning processes, UV and outdoor exposure

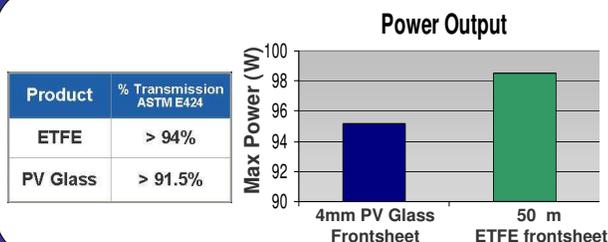
Adhesion to EVA

Laminate peel data

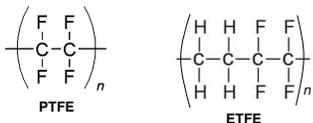


Power Output

Transmission and power output



Architectural Use

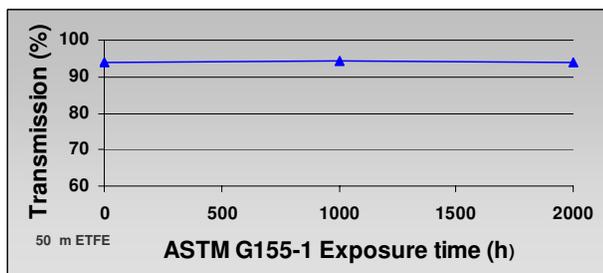


- PTFE and ETFE share similar chemical structures. Both materials exhibit excellent long-term weatherability
- PTFE has been used in fabric membrane roofing since 1973
- In recent years, ETFE used increasingly in outdoor building and roofing structures due to its high light transmittance and durability
- References: ETFE - The New Fabric Roof

► <http://www.rci-online.org/interface/2009-01-wilson.pdf>



Stability of transmission in UV



Tensile Strength

