

Generation

3M™ Scotchshield™ Film 800

Scotchshield Film 800 UL Recognized Component



3M Scotchshield Film 800 is a new non-halogenated alternative backside barrier film for crystalline silicon photovoltaic solar modules.

Specially formulated to provide high voltage insulation and outstanding hydrolysis resistance, 3M Scotchshield Film 800 offers excellent protection against moisture, heat and UV rays that can seriously degrade the performance and reliability of PV modules.

Performance Features

- No interlayer adhesion after environmental aging
- Outstanding hydrolysis resistance
- Low moisture vapor transmission rate
- Excellent reflectivity
- Exceptional compatibility with polyolefin-based encapsulants for strong, durable bonds
- Recyclable material made from a solvent-free manufacturing process

The halogen-free design of Scotchshield Film 800 is based on modified polyolefins and is the newest addition to 3M's backsheet portfolio. 3M Scotchshield Film 800 is available in black/white and white/white color options, and either surface can be laminated to the encapsulant for ease of use.

Processing Features

- Conformable and flexible for ease of lamination
- Compatible with typical lamination conditions up to 175°C (347°F)
- Solvent-free manufacturing process, no residual solvents
- Both sides can be used, no special packaging or storage required



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Generation

3M™ Ultra Barrier Solar Film

Ultra Barrier Solar Film to replace glass - enabling high efficiency lightweight, flexible, photovoltaic (PV) modules.



Designed to address the needs of flexible thin film solar manufacturers, 3M Ultra Barrier Solar Film is a replacement for glass with its high light transmission, superb moisture barrier performance and excellent weatherability.

This revolutionary product is a result of more than a decade of development in transparent barrier technology, as well as over 45 U.S. patents and patent-pending applications. 3M Ultra Barrier Solar Film is engineered for flexible Copper Indium Gallium Selenide (CIGS), Cadmium Telluride (CdTe) and

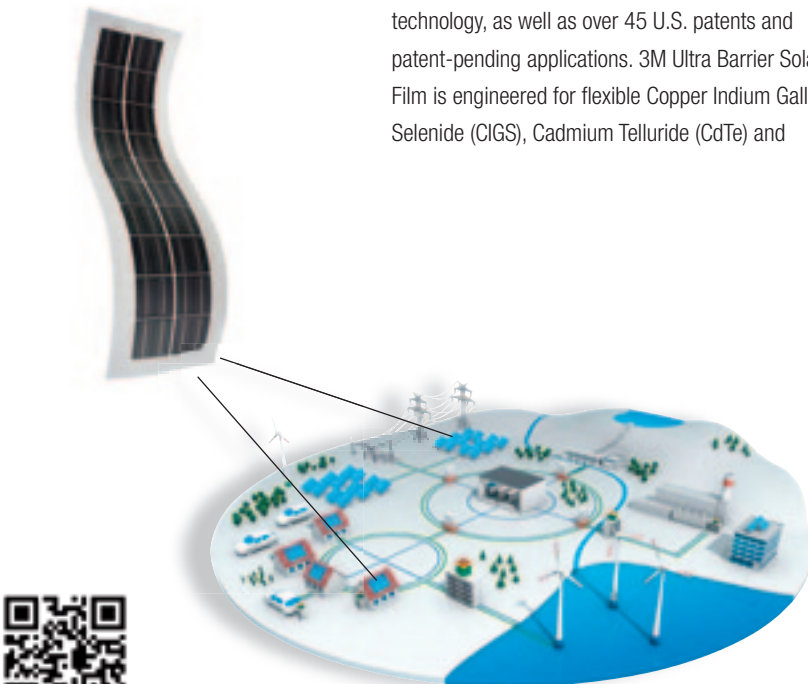
Organic Photovoltaic (OPV) solar modules. It is a multi-layered film made from a 3M proprietary roll to roll vacuum coating process. 3M has combined its knowledge of polymer films, nano technology adhesives and advanced materials to deliver a high-performing front sheet barrier film for the solar industry. Compared with glass-glass modules, flexible PV modules manufactured with 3M Ultra Barrier Solar Film can reduce installation time, remove the need for metal racking, cut logistics expenditures and lower module manufacturing costs.

Features

- Good optical transmission from 400-1400 nm
- Very low moisture vapor transmission rate
- Excellent UV stability
- Flexible

Key Highlights

- UL Certified Component (E316895)
- High Transmission
- Low Shrinkage
- Partial Discharge 1,000V
- Low CTE



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