



3M Technologies for Solar Energy

Identify and Label Solar Modules with 3M™ Labels

Overview

When you send a label into the elements, you hope it will hold up and look good for years to come. Temperature extremes, moisture and sunlight can all take their toll. Legibility may be critical. Look to 3M for label solutions that last.

Product Description

3M provides a broad range of label substrates and adhesives designed to withstand harsh outdoor environments.

Advantages/Benefits

Label materials and overlaminates can be rapidly and permanently applied to solar panels.

- Long-term durability for harsh outdoor applications, including UV, moisture exposure and temperature resistance
- Provides permanent bond to a wide range of surfaces, including high surface energy (HSE) and low surface energy (LSE) surfaces and metals
- Thick adhesive caliper provides stronger bond on textured surfaces
- Facestock is topcoated for thermal transfer printing and other traditional printing forms for optimum durability
- UL 969 – recognized
- RoHS compliance



Product Overview

3M supplies a complete range of materials that will ensure the correct identification and labeling of solar modules.

Materials	Print Method	Facestock (mils) Adhesive Type (mils) Liner (mils)	Aluminum	Glass	Backsheet	Durability	
						UV	Temp.
7816 ¹	Flexo, TT	White Polyester Gloss TC (2.0) 310 (0.8) 55# Densified Kraft (3.2)	•	•		Good	Good
7868	Flexo, TT	White Polyester Gloss TC (2.0) 350 (1.1) 55# Densified Kraft (3.2)	•			Good	Good
FM055702 _{1,2}	Flexo, TT	White Polyester MC (2.0) P1280 (1.2) 50# SC (3.2)	•	•	•	Good	Good
7871	Flexo, TT	White Polyester Gloss TC (2.0) 350 (1.8) 55# Densified Kraft (3.2)	•			Good	Good
7875	Flexo, TT	Platinum Polyester Gloss TC (2.0) 310 (0.8) 55# Densified Kraft (3.2)	•	•		Good	Good
7872	Flexo, TT	Platinum Polyester Gloss TC (2.0) 350 (1.8) 55# Densified Kraft (3.2)	•			Good	Good
7847	Laser Etch	Matte Black/White Acrylate (2.4) 350 (1.2) 55# Densified Kraft (3.2)	•			Excellent	Excellent
7848	Laser Etch	Matte Silver/Black Acrylate (2.4) 350 (1.2) 55# Densified Kraft (3.2)	•			Excellent	Excellent



Overlaminates	Facestock Clarity	Facestock (mils) Adhesive Type (mils) Liner (mils)	Description	Durability				
				UV	Abrasion	Moisture Resistance	Temp.	Chem.
7730FL	Polyester Clear	Clear Polyester NTC (1.0) 400 (0.8) Polyester Film (1.5)	Suitable for indoor and outdoor use	Good	Good	Excellent	Good	Excellent
7733FL	Polyester Clear	UV Resistant Polyester NTC (1.0) 400 (0.8) Polyester Film (1.5)	Resists UV exposure to protect images	Excellent	Good	Excellent	Good	Excellent
7735FL	Acrylate Clear	Clear UV Resistant Acrylar™ (3.0) 400 (0.8) Polyester Film (1.5)	Provides extended outdoor durability to protect images	Superior	Good	Excellent	Fair	Excellent



¹ Passes UL969 water immersion test on solar panel glass surfaces, as well as other standard surfaces. Reference UL file number MH16411.

² Offers most durable bond available for solar panel backside barrier surfaces.

TC= Top Coat
MC= Micro Cavitated
TT= Thermal Transfer
NTC= Non-Top Coated

For more information on our solar manufacturing product line, contact 3M Renewable Energy at 800-648-3550 or visit us at www.3M.com/solar.

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