

# 3M™ Scotchshield™ Film 17

 UL Recognized Component

## Features

- Comformable and flexible for ease of lamination
- Robust processing window for wrinkle-free lamination
- Excellent retention of interlayer adhesion after environmental aging
- Excellent UV stability
- Very low moisture vapor transmission rate
- Solvent-free process, no residual solvents
- Resilient, low flammability fluoropolymer
- No special packaging or storage required

## Product Update

3M™ Scotchshield™ Film 17 has obtained UL Component Recognition status.

## Introduction

3M™ Scotchshield™ Film 17 is a backside barrier film for photovoltaic solar modules. Similar to other commercially available backside films, it utilizes a fluoropolymer layer as a key component. Fluoropolymers are well known to have excellent resistance to degradation from sources such as UV, heat and moisture. Their weatherability exceeds that of non-fluorinated materials.

3M™ Scotchshield™ Film 17 is designed for easy use by module manufacturers. It can be used as received with most existing production equipment and cycles, with no pre-treating required. During lamination, strong, stable, bonds are formed to standard peroxide curable EVA encapsulants.

## Shelf Life

This product has a shelf life of 2 years from the date of manufacture when stored under normal conditions in the original, unopened package.

## Typical Properties (Data not for specification purposes)

Property	Test Method	Unit	Value
Total Thickness (Fluoropolymer/PET/EVA)		mils (mm)	16 (0.4)
Total Weight		g/m <sup>2</sup>	480
Tensile Strength	transverse	ASTM D882	MPa
	machine		38
Elongation	transverse	ASTM D882	MPa
	machine		34
Peel Strength	transverse	ASTM D882	%
	machine		99
			134
Peel Strength	Fluoropolymer to PET	ASTM D1876 (180° peel, post lamination)	lbs/in (N/cm)
	PET to EVA		3.8 (6.7)
	EVA to EVA encapsulant		66 (116)
Dimensional Stability	transverse	ASTM D2305 (150°C/15 min)	lbs/in (N/cm)
	machine		>86 (>150)
Breakdown Voltage	ASTM D149	%	<1
Partial Discharge	IEC 60664-1	%	<1
Moisture Vapor Transmission Rate	ASTM F1249 (23°C, 90% RH)	kV	24
		VDC	>1100
		g/m <sup>2</sup> d	0.8

Environmental stability according to IEC 61215 (2000 h at 85°C, 85% RH) no delamination.

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For more information on our solar manufacturing product line, contact 3M Renewable Energy at 800-755-2654 or visit us at [www.3M.com/solar](http://www.3M.com/solar).

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