# Film Optics Ltd



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39/40 Shrivenham Hundred Business Park Watchfield, Oxfordshire, SN6 8TZ United Kingdom

> Tel: +44 (0)1793 847593 or 847594 Email: info@film-optics.co.uk

# 70/30 Symmetrical Prism Film SPF70/30/100PET

#### **Technical Specification**

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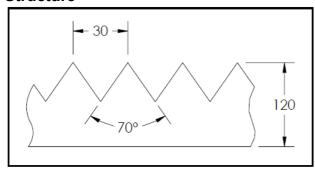
# **Description**

Symmetrical prism structure with 70 degree top angle produced on the surface of a 100 micron PET base film by U.V. casting with acrylic based lacquer.

#### **Applications**

SPF70/30 is used principally as a light deflecting film. Light entering at above the critical angle will be deflected by total internal reflection (TIR). This enables a light source entering from the side to be turned and emitted in a forward direction. The film is used mainly in lighting luminaire design and daylight management applications.

#### **Structure**

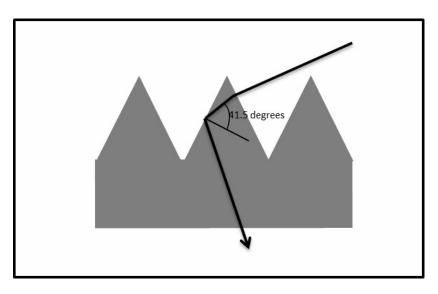


Dimensions are in µm

Parameter	Value	Tolerance	Remarks
Prism Height	20 microns	+/- 2 microns	
Prism Pitch	30 microns	+/- 1microns	
Top Angle	70 degrees	+/- 20 minutes arc	
Base film material	100 microns		PET
Total thickness	120microns	+/- 5 microns	
Product format	On reel		Produced on reels (structure parallel to long edge)
Film width	<1000mm		Can be slit to widths up to 1000mm

## **Optical Properties**

SPF70/30 uses the principle of total internal reflection (TIR) to 'turn' light incident at greater than the critical angle (41.5 degrees).



### Handling

As with all precision optical films care should be taken when handling. Surgical gloves should be worn to avoid fingerprinting. Care should be taken to avoid scratching the film surface. Films should be handled in a clean, dust free environment with a liner used on surfaces to protect the structure. The film can be easily cut using a guillotine, sharp bladed knife or scissors.

#### Sales contact details

E-mail: <u>info@film-optics.co.uk</u>

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Web www.film-optics.co.uk