

# G907000 Refractive Index Matched ITO Coated PET Films with Hardcoat

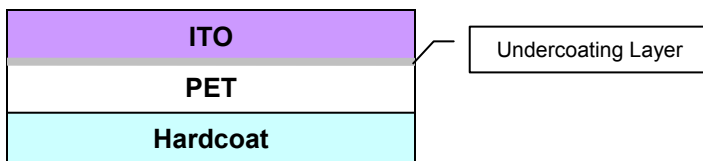
## Description

Sheldahl Brand ITO coated films provide patterned ITO that is virtually invisible when used in projective capacitive touch screen applications. This refractive index match ITO coated film with a gloss hardcoat on the non-ITO coated side is available in both patterned and un-patterned formats. Multek can provide an optical solution for specialty customer applications upon request.

## Features

- Optically clear PET film with hardcoat.
- Precision refractive index matched coatings designed for ITO pattern hiding with hardcoat film.
- Uniform ITO coating with superb light transmission and color properties.
- High volume roll to roll process.
- Specialty protection films and optically clear adhesives available as custom options.

## Construction



- **Film Thickness:** 7.5 mil (188  $\mu\text{m}$ ) optically clear PET film.
- **ITO Resistance Offered:** 270  $\Omega/\square$  standard.
- **Product Format:** Available in rolls or sheets with protection film applied to one or both sides, with optically clear PSA, and with ITO patterning as product options.
- **Width:** Master rolls are 49" (1250mm) wide on 6" (152mm) ID plastic cores. We will custom slit the master roll or sheet to your specification.
- **Patterned Width:** Standard roll widths are to 13" (330mm) or 17.125" (435mm) on 6" (152mm) ID plastic cores.

## Product Offering

270ohm/ $\square$	7.5mil
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## Quality

Sheldahl Brand materials are manufactured using quality systems that conform to ISO9001 and TS-16949 quality standards. Key product characteristics are tested and monitored in accordance to applicable industry and strict internal standards. Certifications are available with product shipments.

## Ordering Information

When ordering please specify:

- Film thickness
- Product roll width
- Patterning schematic and/or CAD file.
- Any applicable custom requirements

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## Shelf Life and Storage

Shelf life is one year when kept at ambient conditions of 21°C and 50% RH in original unopened container.

## Typical Product Characteristics

Table 1

Properties	Units	ITO Coated PET with Undercoating Layer	Test Method
Resistance	$\Omega/\square$	260	Four-Point Probe
%T @ 550nm	%	87.5	ASTM D1003
L* (in Transmission)	%	94.8	ASTM D1003
Color b* (in Transmission)		1.58	Hunter Lab
Color a* (in Transmission)		-0.12	Hunter Lab
Haze	%	1	ASTM D1003
Gloss (60°) of base PET with HC	%	172.5	ASTM-D-1003
Pencil Hardness (Hardcoat side)		3H	ASTM-D-3363
ITO Adhesion		No removal (5B)	ASTM D 3359 Method B
Dimensional Stability (MD / TD)	%	0.6 / 0.02	150°C / 30min.

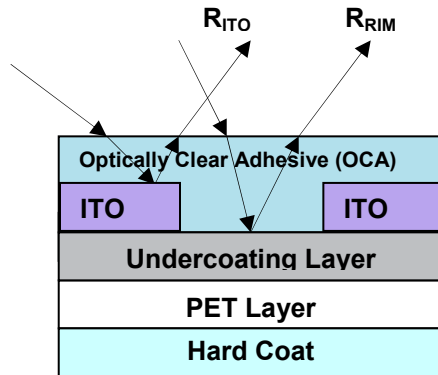


Table 2

Typical Index Match Performance	Layer Stacks of OCA/ITO/UC/PET/HC and OCA/UC/PET/HC
Optical Reflectance Difference between OCA/ITO/UC/PET/HC Stack and OCA/UC/PET/HC Stack $\Delta R =  R_{ITO} - R_{RIM} $ within visible band (400 nm ~ 700 nm)	$\Delta R =  R_{ITO} - R_{RIM}  < 0.7\%$ avg. within visible band

\*The information contained herein is based upon typical data, Multek makes no warranties expressed or implied as to its accuracy and assumes no liability arising out of its use by others. The user should determine suitability of Multek materials for each individual application.