

## ReaLook Product Codes

# 7 2 0 0

### Product category

7 = PET

8 = TAC

### Integrated functions

20 = Anti-static and hard coat

### Adhesive

0 = None

1 = Optical-use adhesive

## Features of the ReaLook Series

8200	7200	2300	2200	1300	1200	
0.3	0.5	0.9	0.7	1.1	1.2	◀ Minimum reflectance
2H	3H	2H	2H	3H	3H	◀ Surface hardness
10 <sup>9</sup>	10 <sup>9</sup>	10 <sup>9</sup>	10 <sup>9</sup>	10 <sup>9</sup>	10 <sup>9</sup>	◀ Surface resistivity
100/100	100/100	100/100	100/100	100/100	100/100	◀ Adhesion
						◀ Steel wool abrasion test

Reflectance was measured at 5° regular surface reflectance after the non-ARAS-coated side had been sanded and a black coating applied.

Surface hardness was tested using the JIS D0202 pencil scratch test.

Surface resistivity value was tested using the JIS K6911 surface resistivity test.

Adhesion was tested using the JIS D0202 grid adhesion test.

A steel wool abrasion test was conducted by rubbing the coated surface with #0000 steel wool for 10 cycles (20 strokes) with a 100 gf (0.98 N) load.

\*See details inside

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Users in the fast-changing digital media age of the twenty-first century demand attractive and precise visual expression. While light is essential for the human eye to sense color and bring images to the viewer, it can also obstruct vision. In our search to control light and ensure a comfortable viewing environment, we at NOF Corporation have developed the ReaLook series of anti-reflection film. This film eliminates the glare and image distortion that stress the eye. Moreover, it can be applied to broad surfaces and is low cost. Our ReaLook series 7200 and 8200 feature strong surface hardness, durability, and anti-static properties and have minimum, near-zero reflection ratios.

*Next Interface*

## Technical Report on Specialized Low-reflection Film

# ReaLook®

7200

8200

### LIGHT

ReaLook's superior optical features have made possible a reflection ratio close to zero. ReaLook eliminates glare and image distortion on screens and other surfaces, resulting in bright, clear visual expressions.

### CUT

ReaLook ARAS coating film eliminates static electricity and cuts ultra-violet rays, and has superior anti-static and anti-glare properties.

### HARD

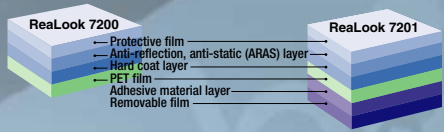
ReaLook's outstanding physical characteristics were developed using NOF-original materials and processing technology. In tests it has demonstrated superior surface hardness, anti-scratch and anti-abrasion properties.

### CLEAN

ReaLook's basic component is a unique water- and oil-repellant material based on fluorine compounds. Surfaces can always be kept clean, as fingerprints and spills can easily be wiped off.

### ECONOMY

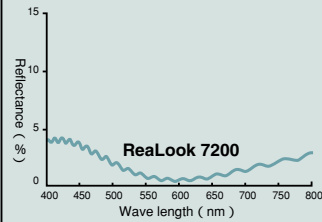
NOF processing technology makes possible large-lot production of ReaLook to cover large surfaces. Compared with deposition and spatter processing, our technology is highly economical.



ReaLook 7200 is produced using NOF-original materials and processing technology, which make it possible to apply ARAS coating to PET film. The non-ARAS-coated side of ReaLook 7201 features adhesive, making it possible to attach it freely to various flat surfaces including glass, acrylic sheets and polycarbonate sheets.

## Optical characteristics

### Reflectance



ReaLook 7200 surface reflectance <sup>\*Note 1</sup>

Minimum reflectance	Photopic spectral luminous efficiency corrected reflectance
0.5%	0.9%

Note 1: Reflectance was measured at 5° regular surface reflectance after the non-ARAS-coated side had been sanded and a black coating applied.

\* Values assigned represent the results of tests conducted in NOF laboratories and are not standard values.

### Transmittance

#### Transmittance and haze of ReaLook 7200 <sup>\*Note 1</sup>

Total light transmittance	Parallel light transmittance	Haze
92%	91%	0.5%

Note 1: JIS K7105

\* Values assigned represent the results of tests conducted in NOF laboratories and are not standard values.

## Durability

### Accelerated durability of ReaLook 7200\*

Item	Test method	Result
Heat test	80 × 1000 hours	No abnormalities in external appearance, optical characteristics or physical characteristics
Moisture test	60 , 90%RH × 1000 hours	No abnormalities in external appearance, optical characteristics or physical characteristics <sup>***1</sup>
Cool test	-40 × 1000 hours	No abnormalities in external appearance, optical characteristics or physical characteristics

Note 1: External appearance may change depending upon basic film used.

\* Values assigned represent the results of tests conducted in NOF laboratories and are not standard values.

### Chemical resistance of ReaLook 7200 <sup>\*Note 1</sup>

Chemical name	Result
Ethanol	No abnormalities in external appearance, optical characteristics or physical characteristics
Physiological sodium chloride solution	No abnormalities in external appearance, optical characteristics or physical characteristics
5% neutral detergent aqueous solution <sup>***2</sup>	No abnormalities in external appearance, optical characteristics or physical characteristics
Silicon oil <sup>***3</sup>	No abnormalities in external appearance, optical characteristics or physical characteristics
Coca Cola	No abnormalities in external appearance, optical characteristics or physical characteristics
Artificial perspiration solution <sup>***4</sup>	No abnormalities in external appearance, optical characteristics or physical characteristics

Note 1: The chemical was deposited on the surface of the coating sample and allowed to stand for 30 minutes at room temperature. Then the chemical was wiped off and the coating sample evaluated.

Note 2: Used Fresh Lime, a dishwashing liquid produced by Nissin Soap Co., Ltd.

Note 3: Used KF-96, produced by Shin-Etsu Chemical Co., Ltd.

Note 4: Composition of 1 liter of solution: 1g urea, 4.6g lactic acid, 8g sodium pyrophosphate, 7g table salt, 20 ml ethanol, diluted in distilled water.

\* Values assigned represent the results of tests conducted in NOF laboratories and are not standard values.

## Physical characteristics

### Physical characteristics of ReaLook 7200\*

Characteristic	Representative value	Test method
Surface hardness	3 H	Pencil scratch test (JIS D0202 <sup>***1</sup> )
Surface resistivity	10 <sup>7</sup>	Surface resistivity test (JIS K6911)
Adhesion	100/100	Grid adhesion test (JIS D0202)
Steel wool abrasion test	No obvious scratches found	NOF test method: rub the coated surface with #0000 steel wool for 10 cycles (20 strokes) with a 100 gf (0.98 N) load
KIMTEX® abrasion test	No obvious abrasion found	NOF test method: rub the coated surface with KIMTEX® for 1000 cycles (2000 strokes) with a 1 kgf (9.8 N) load

Note 1: Evaluated by scratch of coating film.

\* Values assigned represent the results of tests conducted in NOF laboratories and are not standard values.

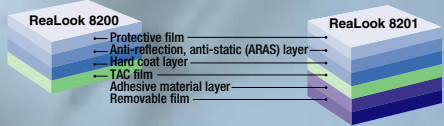
### Accelerated durability of ReaLook 7201\*

Item	Test method	Result
Heat test	80 × 1000 hours	No abnormalities in external appearance, optical characteristics or physical characteristics
Moisture test	60 , 90%RH × 1000 hours	No abnormalities in external appearance, optical characteristics or physical characteristics
Cool test	-40 × 1000 hours	No abnormalities in external appearance, optical characteristics or physical characteristics
Cool-heat cycling test	NOF test method <sup>***1</sup>	No abnormalities in external appearance, optical characteristics or physical characteristics
Thermal shock test	NOF test method <sup>***2</sup>	No abnormalities in external appearance, optical characteristics or physical characteristics

Note 1: -30 × 30 minutes 80 × 30 minutes 100 cycles

Note 2: -40 × 30 minutes 90 × 30 minutes 10 cycles

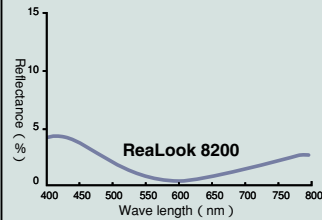
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## Optical characteristics

### Reflectance



ReaLook 8200 surface reflectance <sup>\*Note 1</sup>

Minimum reflectance	Photopic spectral luminous efficiency corrected reflectance
0.3%	0.8%

Note 1: Reflectance was measured at 5° regular surface reflectance after the non-ARAS-coated side had been sanded and a black coating applied.

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### Transmittance

#### Transmittance haze of ReaLook 8200 <sup>\*Note 1</sup>

Total light transmittance	Parallel light transmittance	Haze
95%	95%	0.3%

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