

Anti-Reflection Film

Optical film that reduces reflection of light on a display's surface and improves display's anti-shattering properties

Product Name AR100-T081V-JD AR100-T082V-AD AR100-T062V-BD

Features



- Superior optical performance due to combination of anti-reflective and anti-glare properties
- Repels fingerprints and is easy-to-clean due to anti-smudge layer
- Excellent abrasion resistance, anti-shattering and touch panel compatibility

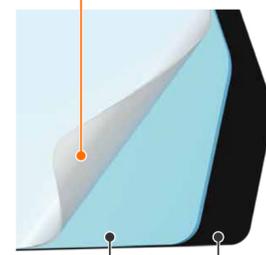
Applications

Suitable for center information displays, instrument clusters, mirror displays

Instrument Cluster



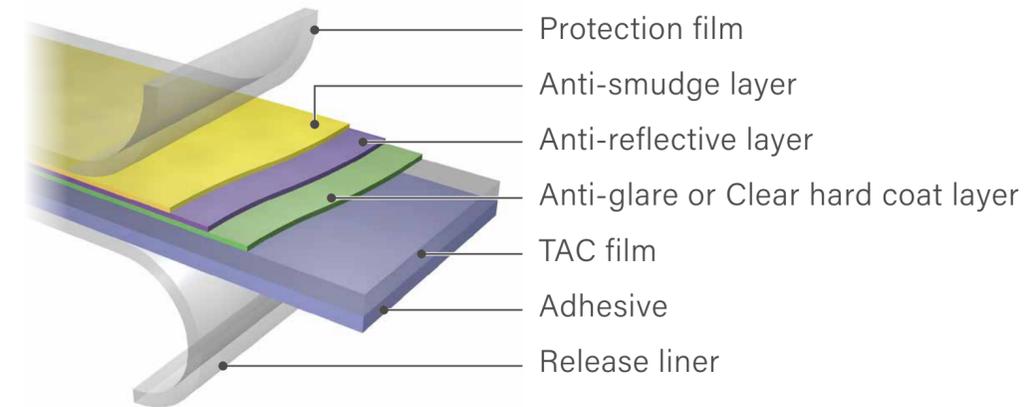
Anti-reflection film



Top plate

Panel chassis

Structure



Effect

AR*1 - AG*2 Properties

Reflection image of fluorescent ceiling lamp on glass / films

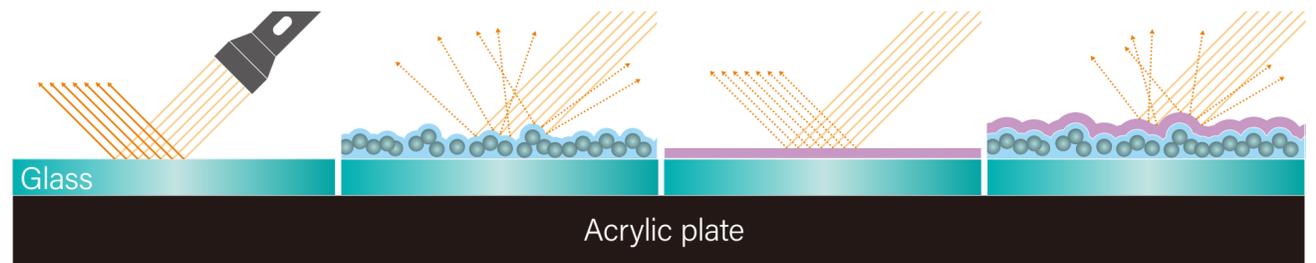


Without film

With film (AG)

With film (AR)

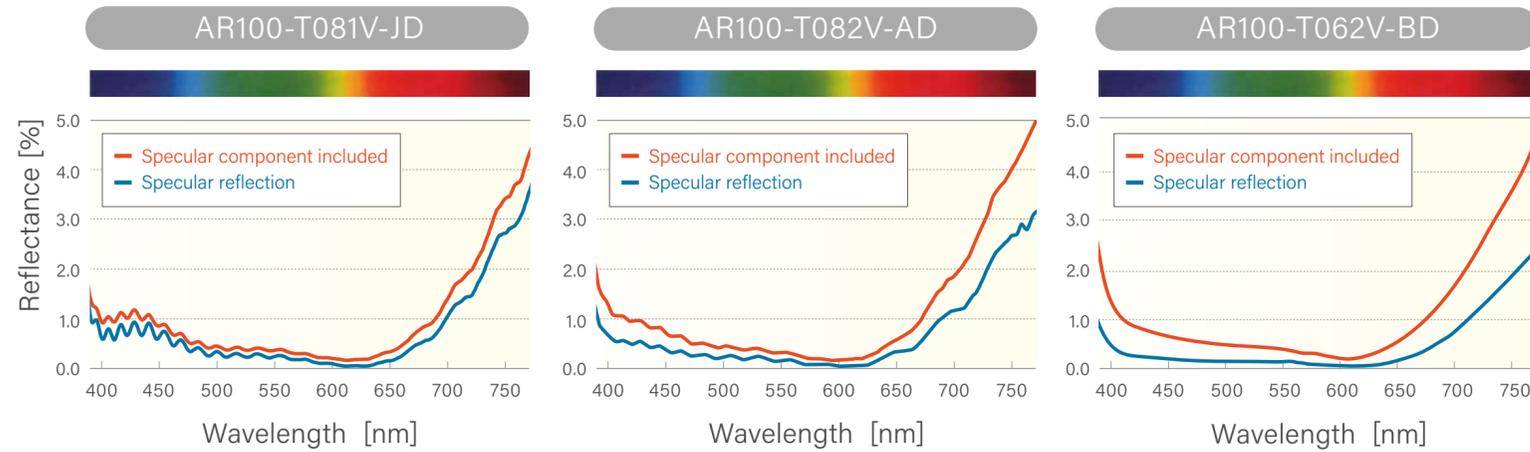
With film (AG and AR)



*1 : Anti-reflection

*2 : Anti-glare

Reflection Spectra



< Test condition >
 Method : JIS Z8781
 Equipment : U-4100 (Hitachi High-Tech Science Corporation)

Specifications

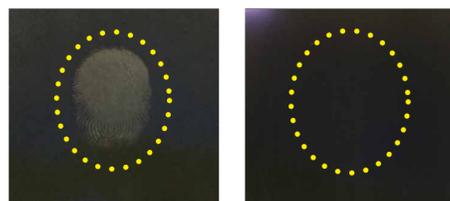
| Item name | | AR100-T081V-JD | AR100-T082V-AD | AR100-T062V-BD | Test condition |
|--------------------------|---------|----------------------------|----------------------------|----------------------------|---|
| Luminous reflectance (Y) | % | 0.18 / 0.32 * ¹ | 0.18 / 0.35 * ¹ | 0.10 / 0.32 * ¹ | JIS Z8701 |
| Hue of reflectance | a* | 1.4 / 2.0 * ¹ | 1.1 / 1.2 * ¹ | 0.0 / 0.7 * ¹ | JIS Z8781 |
| | b* | -6.3 / -7.5 * ¹ | -2.3 / -6.1 * ¹ | -1.5 / -4.5 * ¹ | |
| Haze | % | 0.3 | 4.5 | 12.6 | JIS K7105-6.4 |
| Total transmittance | % | 96.4 | 95.1 | 95.8 | JIS K7105-5.5 |
| Pencil hardness | - | 3H | 3H | 3H | Measured with a load of 500 g based on JIS K5600-5-4 * ² |
| Scratch resistance | - | No scratch | No scratch | No scratch | Steel wool abrasion 2000 gf x 20 times |
| Water contact angle | ° | 115.3 | 115.5 | 113.1 | JIS R3257 |
| Peeling strength | N/25 mm | 10 | 10 | 10 | 90° peeling strength to glass |

*1 : Specular reflectance / SCI (Specular component included)

*2 : Without PSA

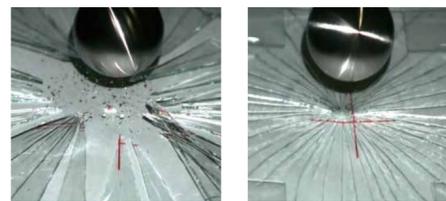
Properties

Easy-cleaning of fingerprint

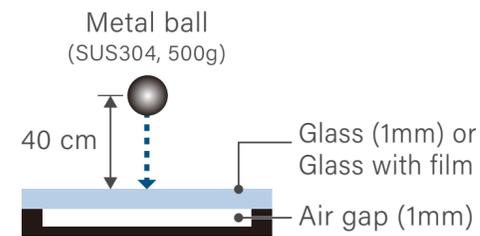


Before wiping After

Anti-shattering



No film With film



Dexerials America Corporation

TEL: +1-586-596-4076

<https://www.dexerials.jp/en/>

Product data described here are based on company evaluation results and are not to be used for specification purposes. Dexerials makes no warranty, representation or guarantee regarding the product data or suitability of the product for any particular purpose. It is essential to evaluate the product to determine whether it fits for a particular purpose and suitable for the user's method or application.

The document was created in September 2021.