

# Plastic Plates with Anti-Reflection Structure

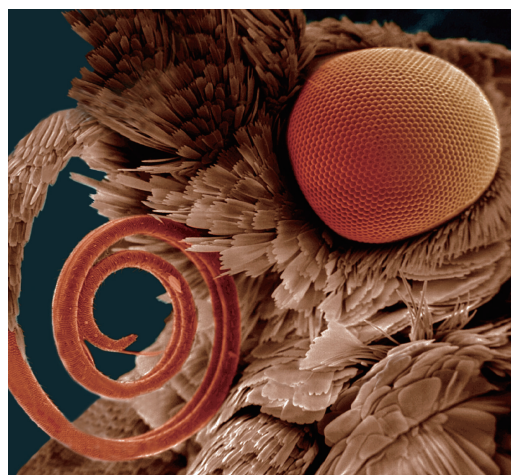
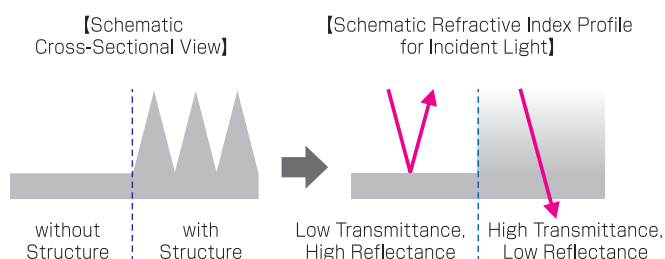
(Development Samples)

## NANO DOT ARRAY

Nanosized dot-type structure which increases transmittance and reduces reflectance has been successfully formed on the surface of plastic plates.

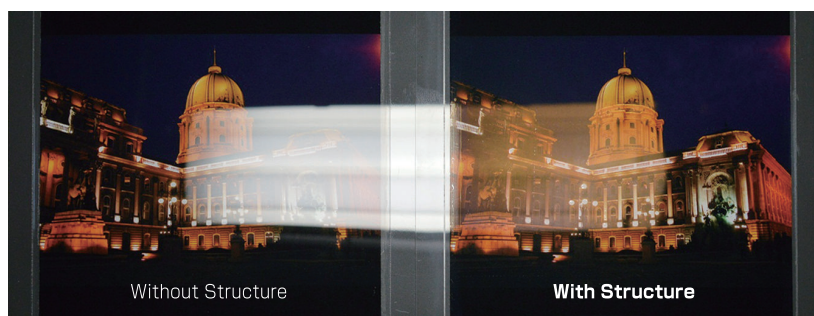
### ■ Anti-Reflection Structure

Light reflection usually happens at the boundary where the refractive index drastically changes, whereas the boundary with nanosized dot-type structure has "gradated refractive index" against incident light, resulting in larger transmittance and smaller reflectance. This kind of anti-reflection structure has been known existing at the surface of moth's eye.



Anti-reflection structure based on these principles has been successfully formed on the surface of plastic plates.

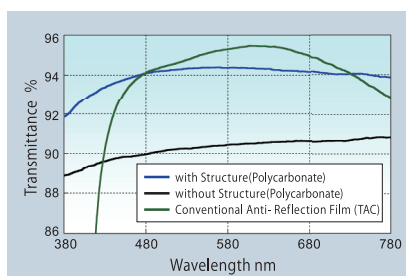
【Appearances of Plastic Plates without Structure / with Structure】



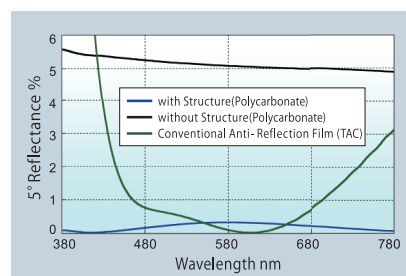
### ■ Custom Design of Optical Characteristics

Customized design is available.  
(e.g. high transmittance type, low reflectance type)

【Optical Characteristics of Development Samples (Material : Polycarbonate)】



Transmission Characteristics in the Visible Light Region



Reflection Characteristics in the Visible Light Region

【Technical information /contact us】  
[https://www.ojiholdings.co.jp/r\\_d/theme/nano\\_dot\\_array.html](https://www.ojiholdings.co.jp/r_d/theme/nano_dot_array.html)



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