Anti-Glare vs. Anti-Reflective Glass

Anti-glare or non-glare glass
Ideal for outdoor or high ambient light applications

Non-glare glass is manufactured by acid etching one or two surfaces of the glass, providing uniform evenly diffused surfaces for high resolution applications. Non-glare glass disperses reflected light, allowing the user to focus on the transmitted image. Non-glare glass is available in several quality and etching levels: from picture frame quality to display quality, and from 60 to 130 gloss units.

The lower the gloss reading, the more diffuse the glass panel surface is. The more diffuse the panel surface, the less glare the viewer sees. However, an inverse relationship exists between the degree of diffusion and the panel’s resolution.

Features of non-glare glass:

- Low reflection, high resolution, superior durability and anti-newton ring
- “Low-Sparkle” grade available for aviation display, military and other high tech display
- Can be heat tempered, laminated or chemical strengthened
- Does not become highly reflective as a result of oily fingerprints like anti-reflective coated glass or untreated surfaces
- For quality assurance, gloss values measured by Gardner Glossmaster 60°
- Available from 60 gloss to 130 gloss units
- Can be etched on one or both surfaces

Typical Applications:

- Electronic Displays
- Cover Screens – monitor face plates
- LCD Displays
- Computer Screens
- Projection Monitors
- Advertising Panels – outdoor electronic monitors & systems
- Touch Screens
- Medical Instrumentation
- Ruggedized Displays
Anti-reflective coated glass
Excellent for all types of ambient lighting and increases transmission which can reduce necessary power output of LEDs and other displays

AR glass is a glass that has been optically coated on one or two sides to diminish reflections and increase the light transmission, to reduce surface glare and increase substrate transmission and brightness offering better contrast definition by reducing surface reflection over a specific wavelength range. Ghost images and multiple reflection can be minimized and possibly eliminated by applying an AR coating on the glass surface. Abrisa Technologies AR coatings are all dielectric single or multilayers and are designed for low reflectance and high transmittance in the UV, visible and near IR spectral bands.

Features of anti-reflective glass:

- High transmission & low reflectance
- Abrisa Technologies can AR coat customer-supplied glass optics or fabricate from our existing stock of anti-reflective coated glass
- Large format AR-coated glass readily available (contact factory for stock availability)
- Contrast enhancement for sharp, clear graphics and text
- Standard broadband AR reduces surface reflection from 4% to less than 0.5%
- Can be used in conjunction with conductive ITO coatings, bus bars, UV rejection coatings and surface enhancement coatings (index matching available)
- Can be custom designed to meet your wavelength requirements
- Anti-Smudge coating can be applied over AR to reduce “fingerprinting”
- Hydrophobic topcoat can be applied to eliminate moisture buildup

Typical Applications:

- Electronic Displays
- Optics for LED lighting
- LCD Displays
- Front Panel Displays
- Thin-Film LCD Heater Panels
- Instrumentation Windows
- Lighting
- Telecommunications
- Architectural Windows
- Display Cases
- Storefronts
- Projection Port Windows
- Sight Glass