

Application Note: CleanVue™ PRO Series Oleophobic & Hydrophobic Coatings for Tough Environments

Abrisa Technologies' **CleanVue™ PRO** – Series of anti-reflection coatings combine improved handling, cleaning, water shedding, and robust performance with excellent anti-reflective properties making it ideal for displays and optical windows intended for use in “tough” outdoor, high traffic, or other challenging use environments.

CleanVue™ PRO – Series anti-reflection coatings are both oleophobic and hydrophobic. CleanVue™ PRO's oleophobic properties repel oil and make the glass easy-to-clean;

fingerprints wipe off easily and the coating provides a non-smudge Surface. The hydrophobic properties repel water and other liquids, allowing for them to be shed easily from the glass, promoting easier “view-ability”. CleanVue™ PRO's hydrophobic coating properties also reduce friction on the glass, providing improved surface “slickness”, enhancing scratch resistance.



Oleophobic & Hydrophobic Coating Practical Applications:

- Outdoor Displays – shed rain, enhance “clean-ability” for high traffic displays
- Portable Instrument Displays – easy-to-remove fingerprints, scratch resistant, water resistant
- Vehicular Displays – easy-to-clean, oleo/lubricant resistant, scratch resistant
- Indoor Touch Displays – easy-to-remove fingerprints, easy-to-clean, scratch resistant
- Indoor Console Displays – easy-to-remove fingerprints, easy-to-clean, scratch resistant
- Portable Medical Displays – easy-to-remove fingerprints, easy-to-clean, scratch resistant
- Outdoor CCD Camera Windows – shed rain □ Outdoor Detector Cover Glass – shed rain
- Lab Instrument Panels – easy-to-clean

Abrisa Technologies' CleanVue™ PRO – Series of Oleo/Hydrophobic AR coatings will not flake or peel off the glass substrate over time and exhibit no negative impact to the glass transparency and image clarity for displays.

- The outdoor UV version; CleanVue™ PRO-AR399 UV performs well at elevated temperatures and direct UV exposure found in most outdoor applications. Glass coated with PRO-AR399 UV will typically retain its water contact angle performance with up to 2000 hours of continuous exposure at temperatures of 200°C and direct UV exposure hours to 10K hours.
- The indoor version of CleanVue™ PRO-AR399 is ideal for environments where repeated high traffic, direct contact, and more abrasion is expected. The coated glass will typically retain its water contact angle performance with up to 12K cycles of steel wool abrasion.

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CleanVue™ PRO-AR399 Series coatings are easy to maintain and are impervious to most cleaners found in the field, the office, and industrial work environments with a pH between 3 and 11, acids, mild alkalis, acetone, diesel fuel, alcohol, road salt, windshield washer fluid, anti-freeze, and most household cleaners.

PRO-AR399 Benefits – Indoor Version (Counter Top Displays):

- Prevents scratching and marring (products/ boxes) moved across the glass
- Makes fingerprint removal easier
- Cleaning takes less effort and less time for an easy-to-clean surface

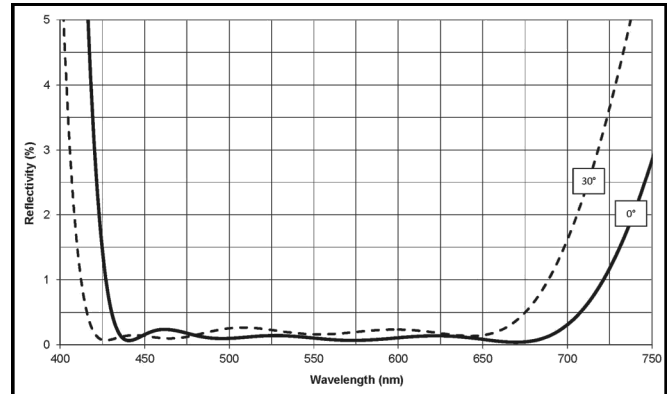
PRO-AR399 Benefits – Indoor Version (Indoor & Cockpit Displays):

- Prevents bonding of dirt and soils to the surface
- Improved visibility
- Makes finger print removal easier
- Anti-reflective coating remains clean in use
- Cleaning takes less effort and less time for an easy-to-clean surface
- Reduced frequency of cleaning required

PRO-AR399 UV Benefits – Outdoor Version (Outdoor Displays including Automotive):

- Improved visibility – (i.e. through rain)
- Makes finger print removal easier
- Anti-reflective coating remains clean in use
- Cleaning takes less effort and less time for an easy-to-clean surface
- Reduced frequency of cleaning required
- Optimized for outdoor UV exposure and higher temperatures to 200°C

CleanVue™ PRO-AR399 series of coatings can be applied to most borosilicate glass (SCHOTT Borofloat®, SCHOTT D263®, BK-7) High Ion-exchange (HIE™) glass, Corning® Gorilla® Glass, SCHOTT Xensation™, AGC Dragontrail™, soda lime glass, fused silica, and low or non-alkaline glass (Corning® Eagle XG® or SCHOTT AF32®). Test samples and other oleophobic/hydrophobic coatings may be available upon request. To find out more, please contact us at: (877) 622-7472 or E-Mail us at: info@abrisatechnologies.com



Application Note

CleanVue PRO™

Glass Fabrication



Coating Deposition



CNC Machining



Strengthening - Chemical & Heat



Screen Printing of Graphics



Abrisa Technologies, a member of HEF Photonics, is a globally recognized technology glass fabrication and optical thin film coating company with expertise in high volume manufacturing and engineering capabilities, delivering Total Solutions that provide excellent performance, fitness-for-use and economies of scale.

Our US based, state-of-the-art ISO 9001:2015 and ITAR registered facilities include Abrisa Industrial Glass in Santa Paula, CA and ZC&R Coatings for Optics in Torrance CA. These two divisions produce solutions from cut-to-order coated glass components to custom complex and ready-to-install fabricated, strengthened, optically coated, electronically enabled and branded sub-assemblies.

Our Total Solutions serve a variety of markets including Micro-Electronics, Defense and Avionics, Display, Industrial Automation, Optical Sensors, Imaging, Photonics, Medical & Dental, Life Science and more.



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