

Coatings on Vitro Low Iron Glasses

Starphire® Ultra-Clear Low Iron Glass and **Acuity® Low Iron Glass** are characterized by their brilliance, clarity, and high light transmittance. These characteristics make **Starphire® Ultra-Clear Low Iron Glass and/or Acuity® Low Iron Glass** the obvious substrates choice when true color rendition is required of coatings on glass such as ceramic frit, back-painting, water-based silicone spandrel glass coating, mirrors, or vacuum sputtered coatings.

To avoid transmitted or reflected color mismatch, Vitro Architectural Glass recommends that these coatings be consistently applied to the atmosphere (air or top) side of **Starphire® Ultra-Clear Low Iron Glass and/or Acuity® Low Iron Glass** and not to the tin (bottom) surface of the glass (the surface in contact with the molten tin inside the bath).

The atmospheric and tin surfaces of float glass can be positively identified and differentiated using a small, hand-held short wave ultraviolet lamp (=254 nm; wavelength). Exposure of the tin surface to ultraviolet radiation causes the extremely minute amount of tin on this bottom surface to fluoresce, or glow slightly on reflection. The top surface may exhibit some fluorescence, but the bottom will always show more.

This method of identifying the two surfaces of float glass applies to all float glass, independent of the glass substrate color or manufacturer.

A recommended ultraviolet lamp is the UVG-54 Handheld UV Lamp, 254nm. For further information contact:

**Analytik Jena US LLC
(Formerly UVP LLC)**
Upland, CA USA 91786
(800) 452-6788

Caution: *Ultraviolet radiation can be damaging to the eyes and skin. Protective shielding may be required. Please contact UVP, Inc., for current product availability and recommended safety practices.*

Ultraviolet Lamp information is located at <https://www.uvp.com/products/ultraviolet-products/uv-handlamps/>

There are also commercially available tin side detectors from several manufactures available on the market. EDM is one of those companies that has several models available including TS2300, TS1301, and TS1320.

Additional information can be found at <https://www.edtm.com/manufacturing-tools/manufacturing-tin-side-detector>



HISTORY TABLE		
ITEM	DATE	DESCRIPTION
Original Publication	11/19/1992	
Revision #1	11/30/2001	Revised & transferred to TD-104
Revision #2	10/04/2016	Updated to Vitro Logo and format
Revision #3	1/22/2019	Updated the Vitro Logo and format
Revision #4	11/13/2023	Updated Starphire nomenclature, added Acuity, and revised source for UV light

This document is intended to inform and assist the reader in the application, use, and maintenance of Vitro Flat Glass products. Actual performance and results can vary depending on the circumstances. Vitro makes no warranty or guarantee as to the results to be obtained from the use of all or any portion of the information provided herein, and hereby disclaims any liability for personal injury, property damage, product insufficiency, or any other damages of any kind or nature arising from the reader's use of the information contained herein.

Acuity™, Atlantica®, Azuria®, Clarvista®, EcoArmor™, Graylite®, Herculite®, Intercept®, Optiblue®, Optigray®, Pacifica®, Pavia® Acid-Etched glass, Platia® Mirror glass, Solarban®, the Solarban® logo, Solarblue®, Solarbronze®, Solarcool®, Solarvolt™, Solexia®, Spandrelite®, Starphire®, Starphire Ultra-Clear®, the Starphire® logo, Sungate®, Sungate ThermL™, Vistacool® glasses, Vitro® and the Vitro logo, VacuMax™, Vitro Authorized™, Vitro Certified™ and the Vitro Certified™ logo are trademarks owned by Vitro and its subsidiaries.