Fluorescence with ARTISTA®?

“ARTISTA® contains no tin layer!”

When users who have already gained experience with float fusing switch over to ARTISTA®, they often begin to look for the tin side with the help of an ultraviolet lamp, only to make an extremely surprising discovery.

ARTISTA® shows fluorescence on both sides of the glass.

The confusion that understandably results with this glowing is easy to clear up, because:

There are no tin adhesions with ARTISTA®!

Those who use ARTISTA® need not worry about clouding due to tin adhesions, because the glow effect is generated by components that the glass is made of, such as titanium oxide, for example.

Titanium oxide is added to the glass mixture to increase the chemical stability of the glass!

For this reason, ARTISTA® clear glass fluoresces with UV radiation throughout the entire glass batch and not only on the surfaces!

A different technique

Whereas float glass in its liquid state is poured into a tank made of melted tin and subjected to gravitational force and surface tension to give it its shape, ARTISTA® is produced using the *Fourcault Process*.

Viscous glass that extrudes from a ceramic nozzle is gradually drawn up perpendicularly through a so-called drawing machine. Before it actually comes into contact with the rollers inside the drawing machine for the first time, the surface of the glass cools off and solidifies to the extent that it can no longer experience imprints or scratches.

Here, one speaks of *fire-polished surfaces* whose brilliance cannot be achieved using any other manufacturing method.

This photograph shows a ceramic nozzle from which the viscous glass is being drawn upwards.

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glass made of ideas

Which side is the top?

In the end, the question of which side is of preference is completely unimportant when using ARTISTA®. Experience shows that one can no longer recognize which side contained the fine structure, following smelting. Also with respect to bubbling that could possibly occur between the base glass and the application, the effect of the plane structure is more a matter of speculation than a measurable quantity.

The number and size of bubbles primarily depends on the size of the area covered and how the temperature is controlled during smelting.

Cloudiness occurs anyway?

If surface cloudiness results during the use of ARTISTA®, from experience the reasons for this can usually be found in either failure to clean or insufficient cleaning before the smelting process begins.

Cleaning is essential!

To prevent slight scratches from being caused by the rollers in the drawing machine, a small dose of sulfur dioxide is applied to the still viscous glass near the ceramic nozzle. (See photo).

An extremely thin protective film results, the so-called *sulphate bloom*. When one rubs a finger over a sheet of raw glass just after it has been delivered, a small amount of white powder accumulates.

This substance can only be removed using cleaning agents that contain a substantial amount of water. Pure ethyl alcohol leaves hazy streaks that become visible following smelting.

To be continued!

We would like to present you with additional articles on technological topics that relate to ARTISTA® by publishing them at irregular intervals in ARTISTA News.

You can register for our Mail Newsletter by going to our web site.

www.schott.com/architecture/english/products/colored-glass/artista/newsletter.html

We will then automatically inform you of new editions by e-mail.

If you have questions on fusing with ARTISTA® or ideas for future editions of ARTISTA News, contact:

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