



Technical Bulletin
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The Color of Clear and Low-Iron Glass

All clear float glass has a very slight green color that comes from a small amount of iron oxide in the batch mix. This slight green color cannot generally be noticed except when looking at the edge of a lite of glass. The shade of the green tint will vary by glass manufacturer, by factory location for a given manufacturer, and the color will also vary from one production run to the next at the same factory. Glass manufacturers will not guarantee a color match closer than a +/- 5% range of dominant visible light transmission from one production run to another. Therefore, it is not possible for a glass fabricator or a glazing contractor to guarantee a color match on replacement clear glass. This is usually not a problem unless heavy (3/8", 1/2" or 3/4" thick) clear glass is involved and the building interior is finished in a white or off-white color.

Low-Iron glass products are formulated to reduce the "green" edge color of ordinary clear glass. The "low-iron" formulations reduce the amount of iron oxide in the batch mix; however, they do not eliminate all of the iron oxide. Therefore, Low-Iron glass products will have some "color", especially when viewed from the edge. This is true of PPG Starphire®, Pilkington Optiwhite™, AFG Krystal Klear™ and Guardian UltraWhite™ glass.

Frequently, consumers view a small sample of a Low-Iron glass for job approval. When a full-sized lite of Low-Iron glass arrives on the job site, the consumer wants to reject the glass because the edge color is much darker than the small sample he viewed. Vitro America strongly recommends that Low-Iron glass be viewed in an actual job size, or a stock sheet size. This will insure that the consumer will not be unpleasantly surprised by the actual glass color.

