

AMIRAN®

Product Information

AMIRAN® consists of multiple optical interference layers that are applied via a dipping process. AMIRAN's residual reflection is only 1% and at 3800 mm x 1700 mm, it offers the largest dimensions in today's market for this type of product. AMIRAN® makes a striking visual impression for both exterior and interior applications in lobbies, showrooms, display windows, restaurants, stadiums and so on.

Product Advantages

AMIRAN® reduces reflections from 8% to as little as 1% and can be used in virtually any setting where high visibility is a must.

Versatile: AMIRAN® can be processed into sound reduction glass, tempered safety glass, glass with integrated UV protection, heat insulation glazing, curved, thermally pre-stressed glass or as silk-screened glass.

Energy saving: Cuts cooling costs because less lighting is required to overcome glare.

Visually striking: Amiran's large format and optimal transparency helps give buildings a distinctively stylish look. Using AMIRAN® also helps dissolve the barrier between the exterior and interior environments and allows for the realization of innovative architectural concepts.

Application Domain

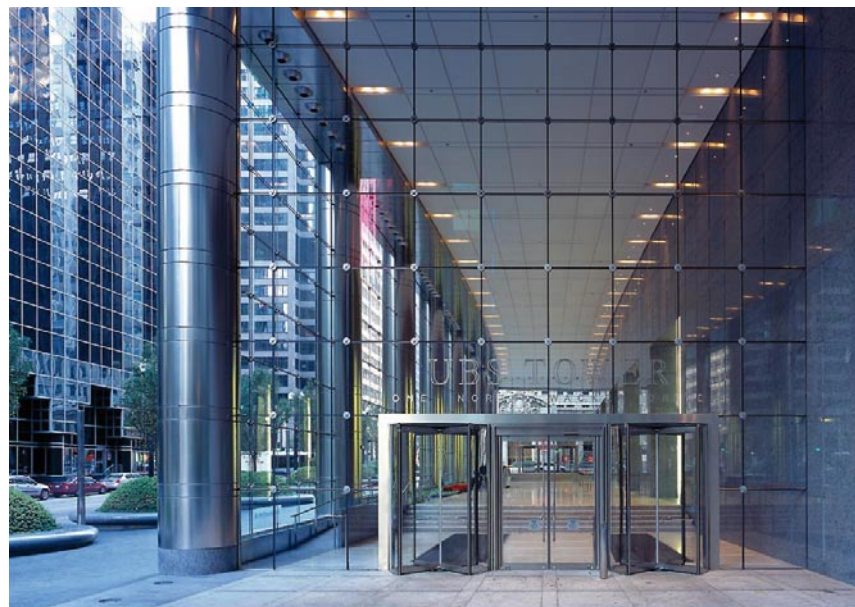
Window and facade glazing; dividing walls; display cases

Configurations

Dimensions (net measurements)

approximately 3800 mm x 1770 mm

approximately 3210 mm x 1770 mm



Materials

Types of glass used

AMIRAN® is an anti-reflective glass that is coated on both sides using a dipping process. For laminated safety glass and float glass with a LowE coating, only the outer side is coated. AMIRAN® can be manufactured using clear float glass, colored float glass, or water-white glass.

Coatingsystem

Antireflection coating in the visible wavelength range using a multilayer optical interference coating system

Colortrueness

Displayed colors appear true behind water white-based AMIRAN® glass.

UV-transmission

UV transmission with single sheet AMIRAN® and double sheet AMIRAN® insulation glass is substantially lower than with conventional float glass. As laminated safety glass, AMIRAN® provides a high level of UV protection UV transmission with double-layer PVB foil: approximately 1%.

Processing Options

AMIRAN® is suitable for drilling, edge finishing, silk screening, bending and countless other processing options. AMIRAN® can be processed into sound reduction glass, single-sheet and laminated safety glass, intrusion protection glass, and as highly heat insulating glass using LowE coatings ($U_g = 1.1 \text{ Wm/m}^2 \cdot \text{K}$).

Residual reflection (at a nearly 90 angle of incidence)

AMIRAN® as a single-sheet or as safety glass: approximately 1 %
(versus 8% for standard float glass) 8 %)

Two-sheet AMIRAN® insulating glass: approximately 2 %
(versus 15 % for standard float glass) 15 %)

AMIRAN® insulation glass/AMIRAN® with a LowE coating: approximately 3%
(versus 15% for standard float glass)

Quality Assurance

Warranty: Schott guarantees that under normal circumstances the coating applied to AMIRAN® antireflective glass will retain its transparency and reflection attenuation properties and that these properties will not change over time. Schott shall replace any defective sheets of AMIRAN® glass free of charge, insofar as the user has demonstrably complied with processing advisory no. 2003 and handling advisory no. 2002. This warranty shall also apply insofar as any sheet of AMIRAN® glass loses any of its specified properties within five years following delivery from the factory, and if said defect is reported to Schott without delay. Glass that is replaced shall not be covered by a new warranty.

Any warranty claims following expiration of said five year warranty period shall be excluded.

The warranty for AMIRAN® insulating glass and safety glass with foil and epoxy resin shall be defined and provided by the vendor that realizes the finishing work on said glass. The allowable tolerances in terms of visual quality and coating defects shall be governed by the relevant technical specifications for TE AMIRAN® anti-reflection glass.

Specifications

Thickness: 4, 5, 6, 8, 10, 12 mm

Other thicknesses available by special order

τ_{vD65} light transmission

AMIRAN® on float glass (standard): 94%

Float glass (standard): 88%

AMIRAN® on water-white glass:* 97%

Water-white glass:* 91% (for 6 mm thicknesses or greater)

**extremely low-iron and clear float glass*

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glass made of ideas