

# SCHOTT BOROFLOAT® 33

Floated borosilicate glass for transparent ballistic protection



- ✓ **Excellent light transmission**
- ✓ **Lightweight benefits**
- ✓ **High impact strength**

**SCHOTT**  
glass made of ideas

# SCHOTT BOROFLOAT® 33 borosilicate glass

## Reliable ballistic protection for your safety

### BOROFLOAT® 33 the best choice

BOROFLOAT® 33 special glass is SCHOTT's globally recognized brand name for flat high-quality, multi-functional, borosilicate glass.

This unique glass is manufactured by SCHOTT Technical Glass Solutions GmbH using the latest technology.

Many years of experience and intensive research efforts into the microfloat process has led to a borosilicate glass that can compete with the best technical-grade flat glass in the world.

Providing reliable ballistic protection requires a material with outstanding performance characteristics many of which are superior to those offered by ordinary soda-lime glass substrates:

- ✓ Excellent light transmission for an unobstructed view
- ✓ Lightweight characteristics allow greater flexibility in the design of composite glazing
- ✓ High impact strength (strike face) ensures superior ballistic performance
- ✓ High resistance against sand abrasion and erosion for longer durability

### Worthy of your trust

SCHOTT Technical Glass Solutions GmbH in Germany is certified to ISO 9001 quality and 14001 environmental protection standards. Both the product itself and the production process are regularly checked by the internal quality assurance team and external regulatory authorities.

SCHOTT has total control over the whole glass manufacturing process from raw material, through to the finished product. This includes ballistic testing at the glass manufacturing facility to ensure international ballistic standards are met. As our partner, you are guaranteed access to the most advanced glass materials in the world.

SCHOTT Technical Glass Solutions GmbH  
 Otto-Schott-Strasse 13  
 D-07745 Jena / Germany  
 Email: info.borofloat@schott.com  
 www.schott.com/borofloat

### Applications

BOROFLOAT® 33 floated borosilicate glass is ideally suited to a wide range of protection applications including:

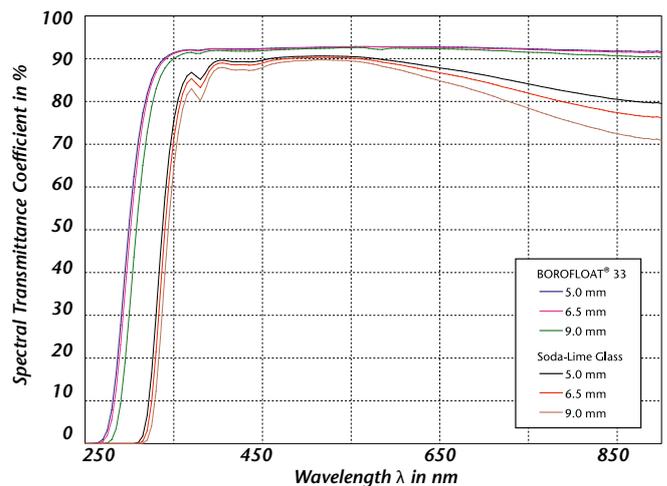
#### Vehicle protection:

On land | At sea | In the air

#### Architecture:

Embassies | Military bases  
 Public buildings (banks, airports) | Residential buildings

### Spectral Transmittance vs. Wavelength



### Technical performance of BOROFLOAT® 33 borosilicate glass compared to ordinary soda-lime glass

Material properties	BOROFLOAT® 33	Soda-lime glass
Density [g/cm <sup>3</sup> ]	2.23	2.52
Abrasion resistance tested by IOF. Initial damage visible after:	50 cycles	10 cycles
Scratch resistance Scratch test SST-101	< 0.05 %	< 0.05 %
Initial damage visible at a force of	364 mN	214 mN
Percentage of visible light transmission compared to control sample after 180 min. of sandblasting	85 %	75 %