

1. DESCRIPTION

1.1 What is BI-Antisoil

BI-Antisoil is a glass with a fine, transparent, easy-to-clean coating, which has been developed by BGT in cooperation with a scientific institute.

The wetting properties of the glass have been changed through enrichment of the perfluorinated groups in the lamination. A water and oil-repellent property has therefore been achieved, which is comparable with Teflon surfaces and which significantly reduces the adhesive strength of the soil or simplifies removal of the soil coating without significantly influencing the other properties of the glass.

1.2 Contamination behaviour

The coating generates a hydrophobic surface upon which soil cannot adhere so strongly. The Figures show the difference between uncoated float glass and BI-Antisoil



or



Contamination behaviour of float glass without and with BI-Antisoil coating with standard contamination (emulsion of Aerosil and engine oil in water).

It can be seen that the standard contamination hardly spreads over the coated pane whilst it almost completely covers the uncoated pane.

2. PROPERTIES

2.1 Optical properties

- No inherent colouring, the transparency of the glass is retained.

2.2 Mechanical properties

- Abrasion resistance (abrasion test according to DIN 52347)
- Good scratch resistance (modified Erichsen Test)
- Very good weathering resistance (UV stability according to DIN 53384, condensate-water test according to DIN 50017)
- High long-term stability
- No after-treatment necessary

3. APPLICATIONS

BI-Antisoil can be used in many ways. Amongst the external applicational options are for example:

- Glazed roofs
- Railway stations
- Airports
- Bus stop shelters
- Greenhouses
- Canopies
- Glass façades

In the internal area BI-Antisoil is ideal for installation in:

- Shower cubicles

4. ADVANTAGES

- Permanent coating
- The cleaning requirements is reduced by up to 75 % according to figures drawn from our experience
- Very high scratch resistance
- Reduced lime and soil accumulations, any remaining soil can be more easily removed
- No aggressive cleaning agents are needed ⇒ less environmental contamination
- Graffiti-proof

5. TYPES OF GLASS

BI-Antisoil coating can be applied to all basic glass which has been made by the float glass process. Following the coating process it is also possible to process the glass as BI-Combiset laminated glass or BI-Therm insulating glass. The side on which the coating is applied is identified in

the production process by fixed dimensions.

6. DIMENSIONS

Maximum manufacturing size:
1600 x 3500 mm

Larger dimensions upon request.

Minimum manufacturing size:
300 x 300 mm

Glass thickness: 4 - 15 mm

Sample panes upon request.

7. CLEANING

BI-Antisoil is a type of glass on which contamination is reduced to a minimum. Normal cleaning can be done with the standard wet process using lots of water, clean cloths, sponges, window leathers or standard commercial soft cleaning utensils and spray cleaners. Scraping tools such as razor blades, steel scrapers and steel wool are unsuitable since they would injure the coating. Treatment with aggressive, chemical cleaning agents and strong alkaline or acidic solutions should be avoided. After every cleaning process the surface should once again be wiped off uniformly with pure, clean water and then dried.

After installation BI-Antisoil must be cleaned of contamination and grease residues in order not to impair the function.

8. GUARANTEE

We guarantee the functionality of the BI-Antisoil coating for 5 years. This excludes faults in the coating caused by mechanical damage as well as the use of incorrect cleaning agents.