SCHOTT BOROFLOAT® for Pyrolytic Ovens

Discover new High Performance Colors

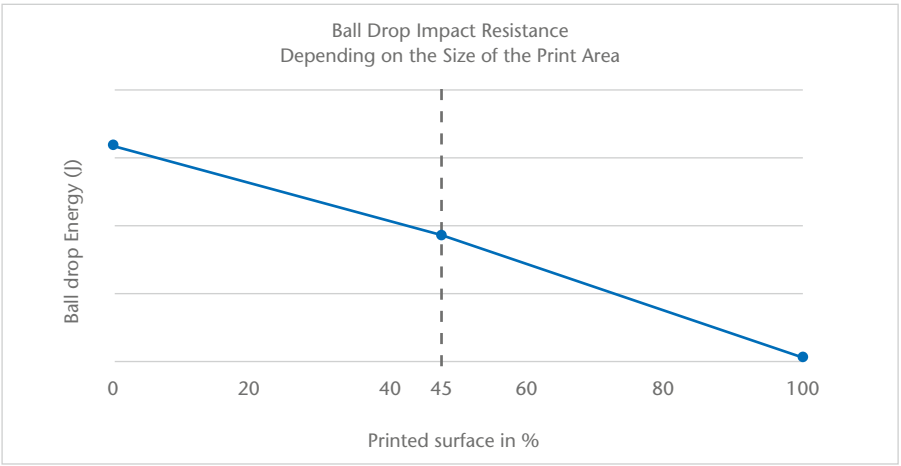
Product Description

SCHOTT BOROFLOAT® is a flat glass with high thermal shock resistance and the ability to withstand temperatures of up to 450 °C for long periods – making it a good choice for inner glass panels of pyrolytic ovens. SCHOTT developed a new enamel for printing on BOROFLOAT® that allows perfect print designs: several colors available, large print surface possible, industry-leading mechanical and chemical resistance. It is the first enamel specially designed for BOROFLOAT® glass. The coefficient of thermal expansion of this enamel has been adapted to BOROFLOAT® for improving firing and print performance.

Benefits

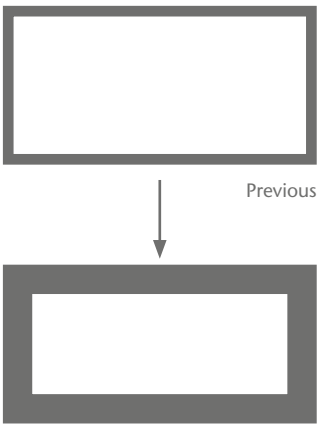
- Extremely high opacity with only one printing run for dark colors
- Excellent scratch resistance
- Several color options available
- Large-area printing possible
- High chemical resistance; protection layer not needed

Impact Resistance



The print area is up to 45 % of the total surface, printed BOROFLOAT® complies with the minimum energy value 1,59 J. Upon request, we test designs with larger print surfaces.

Larger Printable Area

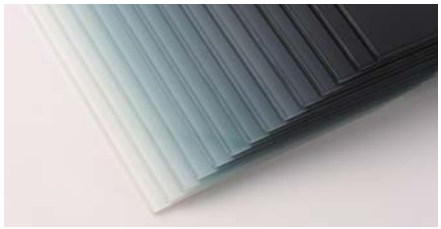


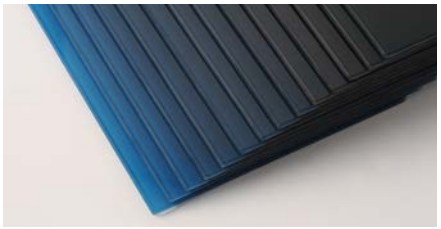
Applications

- BOROFLOAT® is recommended for inner oven doors of pyrolytic backing ovens and other appliances with high demands on thermal and/or chemical resistance.
- High performance color can be printed on BOROFLOAT® and glass coated with low-e-layers.

SCHOTT
glass made of ideas

Technical Properties





Color Options

Standard Color	Blue	White	Black	Anthracite
Optical density 1 layer print (110T)	> 1 D	> 0,5 D	> 2 D	> 2 D
Gloss (printed side)	28 at 60°	42 at 85°	60 at 60°	62 at 60°
L*	28,50 ± 1	69,33 ± 1	6,85 ± 1	8,34 ± 1
a*	–25,25 ± 0,3	–0,15 ± 0,3	–0,05 ± 0,3	–1,33 ± 0,3
b*	–25,60 ± 0,3	2,15 ± 0,3	–1,15 ± 0,3	–4,45 ± 0,3

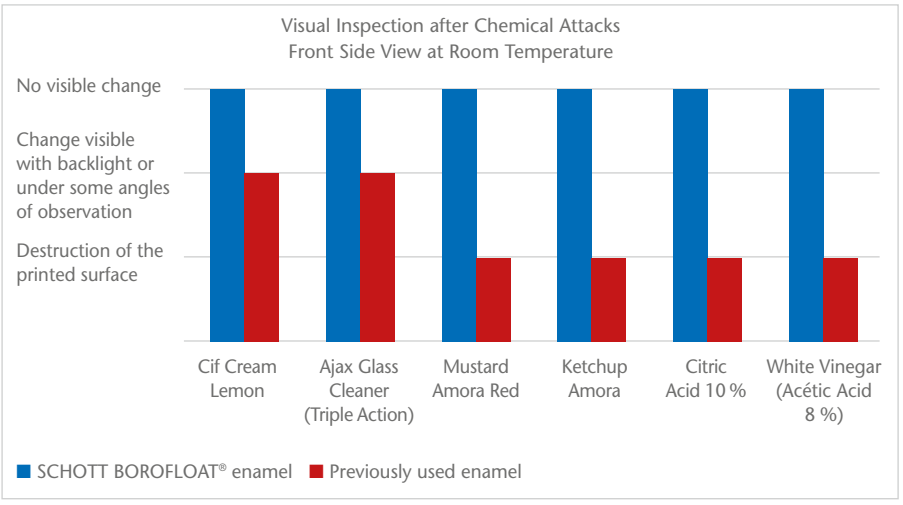
Mixed colors based on these four colors are available upon request. The color white is recommended for printing icons and logos.

Scratch resistance single color print

Resistant to scratches until 10N: % of pinholes < 5 %

Chemical resistance single color print

Resistant to chemical attacks for a layer thickness between 28 – 30 µm



Mechanical Characteristics

The impact resistance of SCHOTT BOROFLOAT® is dependent on many parameters. The following parameters might affect the final impact resistance:

- The way the glass is fitted
- Size and thickness of the glass
- The printed surface
- The way it has been processed (e.g. edge working, holes…)
- The wear and tear of the glass
- The type of impact
- The manner it has been assembled

Recommendations for assembly are available upon request.

Maximum Operating Temperature

- For short-term usage: Temperature max (< 10 h) 500 °C
- For long-term usage: Temperature max (≥ 10 h) 450 °C

Print Options

- Print area surface: up to 45 % of the total surface possible
- Printed surfaces of more than 45 % possible on request
- Print on Low-e coated SCHOTT BOROFLOAT® possible
- Two color print possible for printing a logo. Mechanical resistance might vary to one color print. SCHOTT will carefully check mechanical resistance according to the design.

Reach, RoHS Compliance

BOROFLOAT® enamel fully complies with Reach and RoHS directives.

Glass Sizes

BOROFLOAT® enamel can be applied on glass panels within the following size:
Maximum size: 1.000 x 500 mm
Minimum size: 300 x 150 mm
Thickness: 3,8 mm
Other sizes are available upon request.

Cleaning Recommendations

SCHOTT BOROFLOAT® can be cleaned with any commercial available glass cleaner. Under no circumstances should abrasive sponges, scouring powders or other corrosive or abrasive cleaners be used, as these can cause damage to the surface of the glass.

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