

**BG-NONFLEX.**

PRECISION STRUCTURED  
GLASS SURFACE.



**BERLINER GLAS**

Technical Glass  
BERLINER GLAS GROUP

# BG-NONFLEX.

In technical applications glass is used because of its material or surface properties serving desired functions. Our BG-Nonflex glass provides modified surfaces that optimize these functions for many areas of application. Light scattering in transmission or reflection can be adjusted to desired values, surface friction or surface tension can be optimized for specific applications or design requirements can be met.

## APPLICATIONS

BG-Nonflex is used as a diffuser screen for lighting systems, as a rugged cover screen with anti-reflective properties for analog or digital display systems, as an interface with optimized fingerprint or smudge resistance or as a material with reduced contact surface area, leading to better friction properties. BG-Nonflex is used in OR lights in hospitals, in automatic teller machines (ATMs), vehicle information displays, industrial HMI interfaces and displays, scales, elevator fittings, operator panels or as a functional component of a machine.

## PROCESSING

BG-Nonflex glass can be processed like any untreated glass. Processes such as cutting, bending, drilling, edge grinding, chemical or thermal strengthening, printing (organic or ceramic) or even coatings are possible.

BG-Nonflex glass can be processed to tempered safety glass (thermal), semitempered glass (thermal) or laminated safety glass.

## SPECIFICATION

Gloss value (Europe 20°)*	GW 8 (±5)	GW 20 (±10)	GW 40 (±10)	GW 60 (±10)	GW 80 (±10)	GW 100 (±10)
Gloss value (US-Gloss 60°)*	GL 20 (±5)	GL 40 (±10)	GL 75 (±10)	GL 98 (±10)	GL 115 (±10)	GL 130 (±10)
Structuring	single side					

### Technical data (typical value)

Distinctness of reflected image (DOI)	1 %	2 %	4 %	20 %	30 %	40 %
Residual reflection	0.05 %	0.1 %	0.16 %	0.8 %	1.2 %	1.6 %
Clarity	30 %	50 %	70 %	80 %	90 %	95 %
Haze	50 %	12 %	8 %	5 %	3 %	2 %
Roughness Rz (µm)	55.0	3.5	2.1	1.7	1.3	1.0
Interaction with display, sparkling	10 %	10 %	15 %	25 %	30 %	30 %

### Standard size\*

### Standard glass thickness\*

1,200 x 2,000 mm		2.0 mm	3.0 mm	4.0 mm	5.0 mm	6.0 mm
1,200 x 1,600 mm		2.0 mm	3.0 mm			
1,020 x 1,600 mm		2.0 mm	3.0 mm			
820 x 1,600 mm		2.0 mm				
800 x 1,600 mm				4.0 mm	5.0 mm	6.0 mm
640 x 1,600 mm	1.6 mm	2.0 mm	3.0 mm	4.0 mm		

\*other thicknesses and sizes on request

## KEY FUNCTIONS

### Individual design

- ▶ Adjustable gloss values, surface roughness values or characteristic parameters according to customer requirements
- ▶ Surface with specific profiles for improved dirt resistance and easier cleaning
- ▶ Reduction of the contact surface for improved tactile properties and the avoidance of static charging

### Robustness

- ▶ Insensitive to contamination, e.g. from oils or greases (tested according to DIN EN 10545-14 and certified in Class 5)
- ▶ Fingerprints far less visible
- ▶ High scratch resistance (tested according to Mohs [DIN EN 101] and certified in class 6)
- ▶ Suitable for use with food (tested according to DIN 51032 and classified as without problems)

### Scattering

- ▶ Diffusivity in reflection and transmission

### Anti-reflex

- ▶ AR independent from the angle