



CURVESHIELD

DESCRIPTION

CURVESHIELD is a heat-treated (fully-toughened or heat-strengthened) glass that is bent to a single-radius profile through an advanced cylindrical bending system controlled through millimeter-precise integrated gear system. This ensures absolutely even curvature throughout the width of the glass. The heating is controlled through a high-powered top-and-bottom convection heating system that enables heat-treatment of the most advanced coatings available in the market. Along with this the machine is equipped with an advanced and precise cooling (or quenching) system to ensure minimum levels of iridescence. CURVESHIELD is an extremely bespoke product in the architectural space, and can be used to create aesthetically stunning facades, interior partitions, frameless glazing, shower cubicles and furniture.

PRODUCT FAMILY

1. CURVESHIELD FIRST: Clear glass
2. CURVESHIELD CLARITY: Ultra clear glass
3. CURVESHIELD TONE: Tinted glass
4. CURVESHIELD SOLAR: Solar-control coated glass (pyrolytic or MSVD coated)
5. CURVESHIELD PRO-1: Low-E coated glass (pyrolytic coated)
6. CURVESHIELD PRO-2, PRO-3, PRO-4: Silver Low-E glasses (MSVD)*

* Not applicable for monolithic glazing. Only possible when made into an insulated or laminated glass assembly.

GENERAL CHARACTERISTICS

FEATURE	DESCRIPTION
Process Type	Horizontal Roller-Hearth Convection Furnace
Glass Types	Clear, extra clear, ultra clear, tinted, solar-control coated, low-E coated
Additional Process Compatibility	Ceramic-frit, digitecture™ digital printing, sand-blasting, acid-etching, holes, cutouts and notches
Product Enhancement	Can be converted to CLIMACOOL (insulated glass), LAMISECURE (laminated glass), BULLETSHIELD (bullet-resistant glass) and BURGLARSHIELD (burglar-resistant glass)
Glass Thickness	5 mm to 19 mm
Edge Types	Rough grind, arressed, super polished
Compressive Stress (Surface)	30 MPa to 52 MPa (4,300 psi to 7,500 psi) - Heat Strengthened
	69 MPa (10,000 psi) minimum - Fully Toughened
Emissivity	Minimum 0.01**

** Lower emissivity only applicable for insulated or laminated glass assemblies.

UNIQUE SELLING POINTS



HEATING SYSTEM

Top-and-bottom forced turbo-charged convection system



HEATING CONTROL

Heat-scanner with precise measurement points



PRECISE BENDING

Gear-operated cylindrical bending control

DIMENSIONS

FEATURE	DESCRIPTION
Minimum Size	800 mm (W) X 600 mm (H)
Maximum Size	2500 mm (W) X 3000 mm (H)
Minimum Bending Radius	1000 mm (5 mm to 8 mm)
	1800 mm (10 mm)
	2500 mm (12 mm and 15 mm)
	3000 mm (19 mm)

LABELLING

Each piece of CURVESHIELD shall be permanently labeled with the FG logo, process type and relevant standard description. In cases where the glass is made under a specific listing, the same shall be incorporated in the label. Order-specific labeling is also possible, under certain terms and conditions.

STANDARDS

CURVESHIELD is manufactured as per ISO 11485.

STORAGE

CURVESHIELD requires storage vertically in a covered, dry area, unexposed to rain and dust. Each sheet of CURVESHIELD should be separated with the help of non-adhesive transferring cork/rubber pads. It is recommended to store CURVESHIELD along its straight edge. Prolonged storage without separation or with paper separation may result in permanent and irreversible damage to the glass surface. This is even more critical for coated surfaces.