



## F A C A D E S H I E L D

### DESCRIPTION

FACADESHIELD is a heat-strengthened glass that is two times mechanically stronger than annealed glass of the same thickness. FACADESHIELD is primarily a facade glazing material, with advantages of better optical clarity and no possibility of nickel-sulphide induced spontaneous breakage over fully toughened glass. However it is to be noted that FACADESHIELD is not classified as a safety glazing material, so wherever the building codes require the glazing to conform to safety norms, fully toughened or laminated glasses should be used. FACADESHIELD should also be used in applications where there is no point-load and the weight of the glass is distributed evenly over its two or four edges, such as in curtain walls and structural glazed systems. FACADESHIELD is manufactured in one of two electric horizontal roller-hearth tempering lines. Both lines are equipped with 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 machines are equipped with an advanced and precise cooling (or quenching) system to ensure minimum levels of iridescence and very high glass flatness.

### PRODUCT FAMILY

1. FACADESHIELD FIRST: Clear heat-strengthened glass
2. FACADESHIELD CLARITY: Ultra-clear heat-strengthened glass
3. FACADESHIELD TONE: Tinted heat-strengthened glass
4. FACADESHIELD SOLAR: Solar-control coated heat-strengthened glass (pyrolytic or MSVD coated)
5. FACADESHIELD PRO-1: Low-E coated heat-strengthened glass (pyrolytic coated)
6. FACADESHIELD PRO-2, PRO-3, PRO-4: Silver low-E coated heat-strengthened glass (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
Product Enhancement	Can be converted to CLIMACOOL (insulated glass) and LAMISECURE (laminated glass)
Glass Thickness	3 mm to 12 mm
Edge Types	Rough grind, arrissed, super polished
Compressive Stress (Surface)	30 MPa to 52 MPa (4,300 psi to 7,500 psi)**
Emissivity	Minimum 0.01***

\*\* For thickness 8 mm and above, please consult with our sales team to determine the stress levels based on the glass type and size.

\*\*\* 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



### COOLING CONTROL

Dual-oscillating quenching to minimize anisotropy

## DIMENSIONS

FEATURE	DESCRIPTION
Minimum Size	200 mm X 300 mm
	2440 mm X 3660 mm (4 mm and 5 mm)
Maximum Size	3000 mm X 5100 mm (6 mm)
	3000 mm X 6000 mm (8 to 12 mm)*

\* Maximum possible size may vary based on glass type. Please consult with us before specifying.

## LABELLING

Each piece of FACADESHIELD 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

FACADESHIELD is manufactured as per BIS 16982: 2018, EN 1863: 2004 and ASTM C1048-04.

## LISTINGS

1. Safety Glazing Certificate Council ANSI Z97.1 - 2015 & CPSC 16 CFR 1201 - License Number 8344 & 8355

## STORAGE

FACADESHIELD requires storage vertically in a covered, dry area, unexposed to rain and dust. Each sheet of FACADESHIELD should be separated with the help of non-adhesive transferring cork/rubber pads. 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.