



SAFE TOUGH

TEMPERED SAFETY GLASS

Product Description:

PSG's Tempered Safety Glass is manufactured using horizontal 'roller hearth' process with state of art machine. The glass is manufactured by heating ordinary float glass to its softening point (about 700°C) and then cooling glass rapidly by quenching it with a uniform blast of air on both surfaces simultaneously. This special heat treatment improves the mechanical and thermal characteristics of the glass.

Product Features:

Strength

Saif Tough is 4 to 5 times stronger than ordinary anneal glass of same thickness and is 100 times more secure.

Thermal Stress Resistance

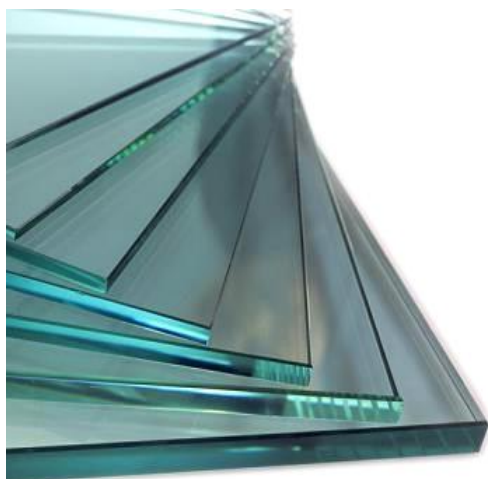
Saif Tough is more resistant to thermally induced stress and can therefore withstand extremes of heat and cold which can cause ordinary anneal glass to crack.

Color

In addition to clear glass, Saif Tough also comes in various colors or tints, and can be reflective and Low-E as well.

Parameters

Production	Size (mm)	Thickness (mm)
Minimum	100 x 300	4
Maximum	2440 x 4876	19



Applications:

Wherever the benefits of ordinary glass need to be combined with extra strength, safety, or heat resistance, Saif Tough can offer a complete and proven solution.

- Places where safety regulations must be met
- Curtain Walls
- Passage ways and area of high pedestrian traffic
- Frameless glass doors
- Shower and bath enclosures
- In balconies, Balustrades and staircases
- Shop fronts and showcases
- Windows for vehicles, ships etc.

Characteristics:

	Annealed Glass	Saif Tough
Typical breaking stress	6,000 psi	25,000 psi
Surface compression	3,500 psi	10,000 psi
Typical impact velocity causing fracture	30 ft/sec	60 ft/sec
Resistance to temperature gradient over pane surface	40 K	150 K
Maximum service temperature	100°C	200-300°C
Bending strength	45 N/m	100 N/m

Note on use and glazing:

After manufacturing it is impossible to do any processing such as cutting, drilling or grinding on tempered glass. Therefore, all dimensions and specifications must be determined before the glass is tempered.