

12mm heat-strengthened glass,12mm clear semi-tempered glass,12mm half toughened glass

12mm clear Semi-tempered glass, also known as 12mm colorless heat-strengthened glass, it is a kind of heat processed glass that naturally cooled after tempered heating the [12mm clear float annealed glass](#), to obtain half toughened glass which strength better than annealed glass, while avoid self-explosion phenomenon.

12mm clear half-tempered glass specification:

Available size: Maximum 3000*8000mm, Minimum 150*300mm, any customized size.

Edge work:

Any edges could be done perfectly, like flat polished edge (T edge), pencil edge (C edge), beveled edge, ogee edge, matt edge, corner round edge.

Holes and notches:

Tempered glass can be supplied with drilled holes (no matter straight or conical) and cut notches. We will made hole and notch locations and size according to your drawings.

Shapes:

Except rectangle, also like round , Trapezoid, parallel, etc. are ok by your design.

Beveling edges, cutting notches, drilling holes, grinding corners, etc. all could be done, but must be done before tempering.

Other option:

If you needn't 12mm, we also have 5mm 6mm 8mm 10mm 15mm 19mm heat strengthened glass for your, with clear and tinted green, grey, blue and bronze,

Let's compare 12mm clear tempered glass and 12mm clear Semi-tempered glass on their characteristics:

1. Process:

The surface compressive stress of semi-toughened glass goes between 24MPa to 52MPa, and tempered glass to be more than 69Mpa. Due to low stress, half tempered glass will not occur self-explosion phenomenon.

2. Security:

Full tempered glass is safety glass. After broken the glass become granular can reduce harm to the human body.

Semi-tempered glass breaks, the fragments are big and radial state, each piece extends to the edge, it is not easy to fall off, relatively safe but still not a safety glass.

3. Resistance

Full tempered glass strength increased 3 to 5 times, and capable of withstanding a temperature change of 250 to 320°C.

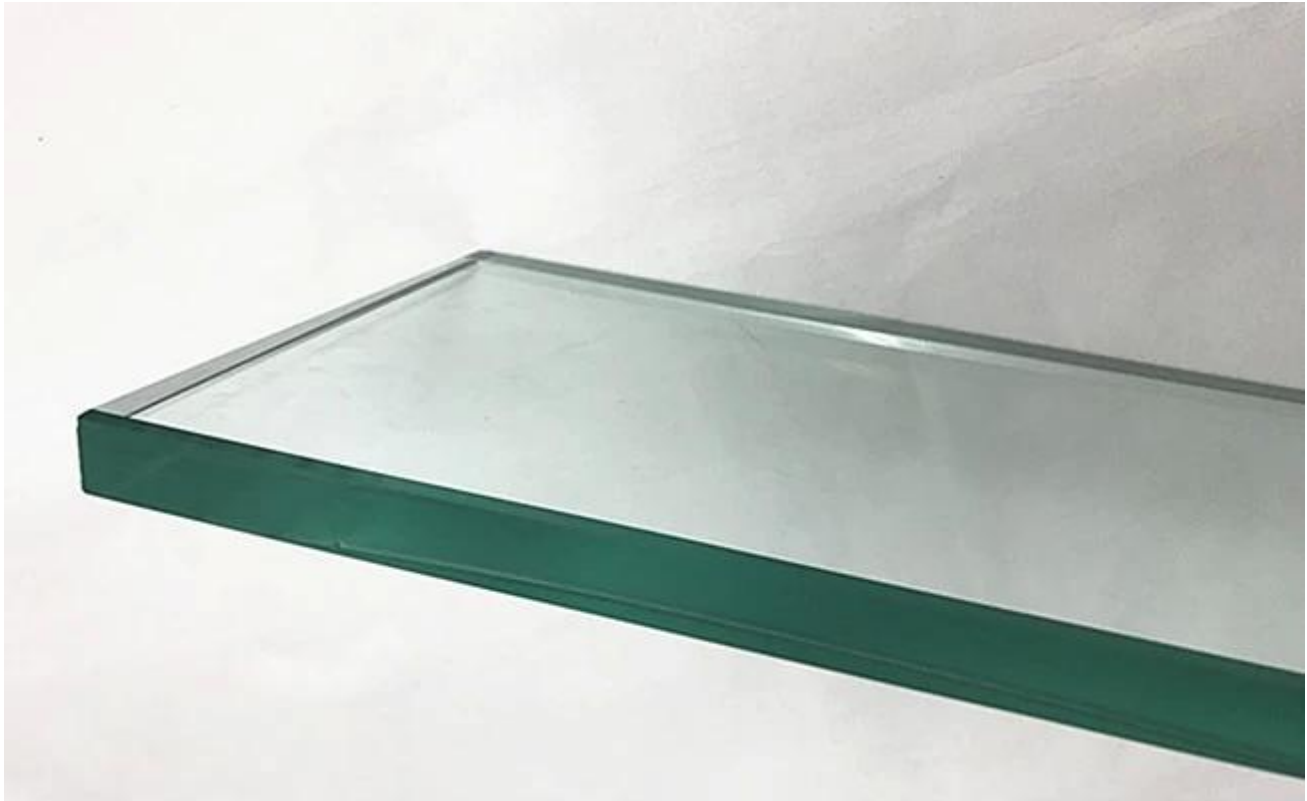
Semi-tempered strength and thermal shock resistance are slightly lower than the [tempered glass](#). While compared to ordinary float glass, improved 1-2 times tougher than normal glass, but avoid the bad flatness of tempered glass.

Do you know when will choose heat strengthened glass?

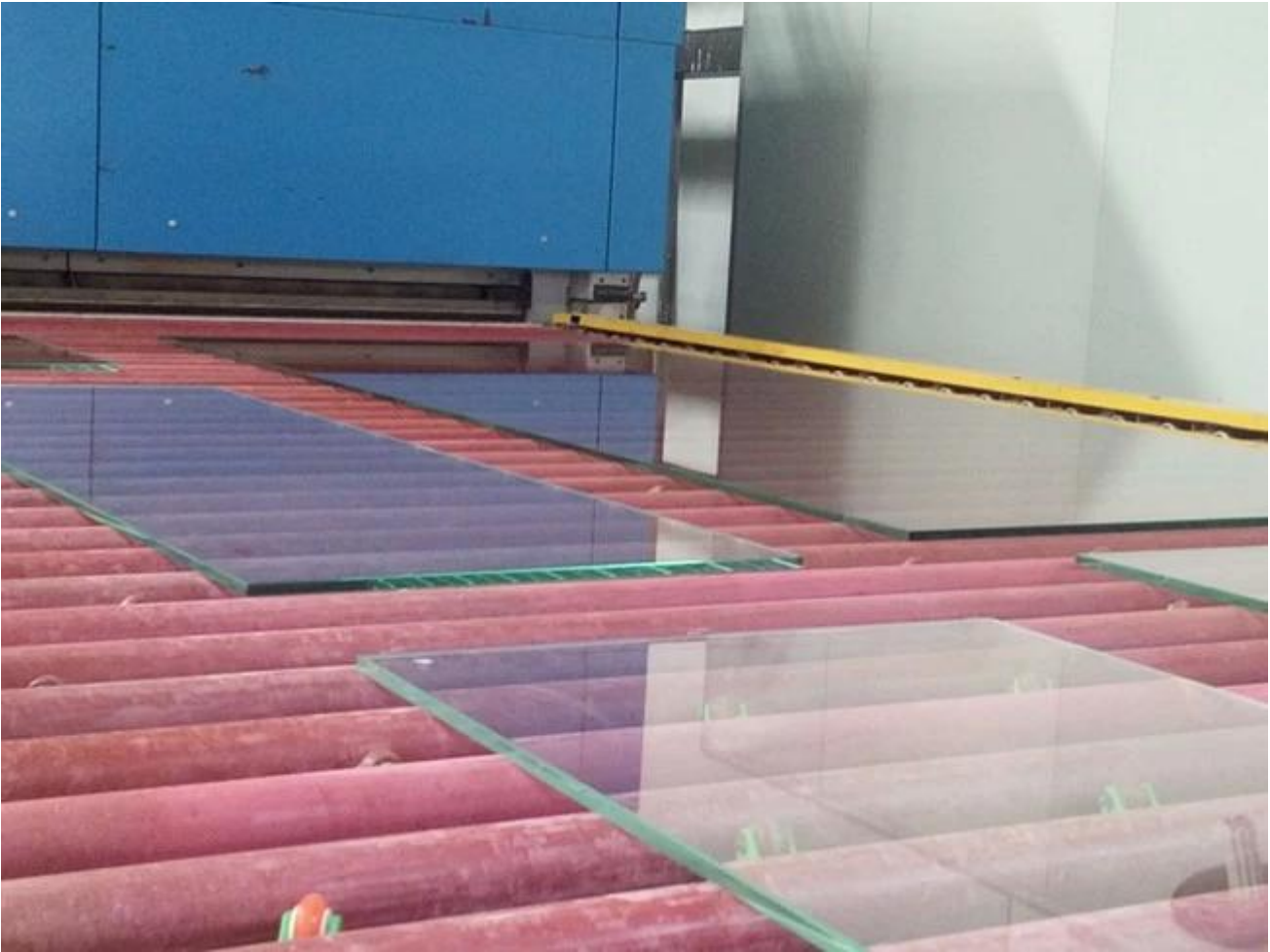
As monolithic half-tempered glass (heat-strengthened glass) does not belong to safety glass,so we can made it into laminated glass or insulated glass,also can be made of coated tempered glass use for [glass curtain wall](#) and outside glass window in tall building.

Because of once broken, semi toughened glass will form large debris and radial cracks. Most fragments are with sharp corners, and will cause harm for human beings. The half toughened glass can not be used for skylights or possible occasions that human touch directly.

12mm heat-strengthened glass:



12mm semi toughened glass production process:



12mm heat-strengthened glass made into laminated glass or insulated glass,use for glass curtain wall and outside glass window in tall building.

