# Building glass factory supplier export products clear 12mm toughened glass for outdoor balustrade balcony

# **Tempered glass**

Tempered glass, also known as toughened glass. It is manufactured by heating the annealed glass above 600 ° C and rapidly cooling it to produce the corresponding applied pressure. It is a safety glass that is used when strength, heat resistance and safety are important considerations.



# Characteristic

#### Thermal stability

Tempered glass can withstand temperature changes from 250 to 320  $^{\circ}$  C, and ordinary annealed glass can only withstand temperature changes of 20 to 100  $^{\circ}$  C.

### **Specification**

12mm <u>tempered glass</u> size: up to 3000 \* 8000mm, any size can be customized. All processing on 12mm tempered glass, such as cutting, drilling, digital printing, etc., it must be completed before tempering.

#### **High strength**

Tempered glass performs well in resisting bending and hitting because its high strength is 3-5 times that of normally annealed glass. It can withstand surface pressures of 90 MPa.

#### **High security**

When the tempered glass breaks, it becomes a honeycomb particle with an obtuse angle, ensuring safety and ensuring that the human body is harmless, and the toughening process greatly reduces the risk of thermal cracking and ensures loss reduction.

#### Edge work

Any edge can be perfectly finished on 12mm transparent tempered glass, such as flat polished edges, pencil edges, beveled edges, OG edges, and rounded edges.

#### Hole and notch

Tempered glass provides drill holes and cuts. We will consider the location and size of the holes and notches according to your drawing. Please review the following details:

The edge of the glass to the nearest hole point:

The hole of 12mm tempered glass should not be less than 2 times the thickness of the glass.

#### Glass corner to the nearest hole point

The position of the hole should not be less than 6.5 times the thickness of the 12mm tempered glass.

#### Hole size

The minimum size of the holes should not be less than the thickness of the glass. The maximum size of the hole should not exceed 1/3 of the narrowest dimension of the workpiece.

Feature(性能)	Tempered(钢化)	Heat strengthened(半钢化)	Normal(普通)
Safety(安全性)	best(最好)	general(一般)	none(没有)
Intensity(强度)	150mpa	100~1520mpa	30~90mpa
Themal stabilityre(热稳定性)	250~320°C	100°C	2~100°C
Surface stress(表面应力)	95mpa	24–69mpa	
Broken state(破碎状态)	obtuse-angele grain(纯角颗粒)	shooting broken(放射状破碎)	sharp(锐利)
Self- destruction(自爆)	sometimes(会)	seldom(基本不会)	never(不会)

# **Quality Standard**

Conforms to EN12150 European tempered glass standard Meets ANSI Z97.1 US standards Meet the GB 9963-1998 tempered glass standard Meet the GB 17981-1999 Chinese standard tempered glass Passed China Safety Glass Compulsory Certification CCC

