# Best-selling 22.28mm laminated curved glass railing hot bending process



A small radius curved glass railing has long been of great interest to the market. Curved glass brings elegance and energy to glass guardrails, whether using it at home or in the shopping mall.

The process of creating a high-quality small radius curved glass has evolved over the years. With continued research and development, use of the latest technology and machine, it's now possible to bend a much wider range of radius, sizes, and thicknesses.



### What is a small radius of curved glass?

Producing curved glass usually begins with a mold. As a baseline for the curved glass that they will bend into the desired shape. Once the mold is completed, it's preheated to the desired temperature for about an hour before the glass is put into the mold. Any great temperature differences between the mold and the glass could cause the glass to shatter, so preheating the mold is very important.

While the mold is preheating, the flat pane of glass that will eventually be stretched and curved to the desired shape is cleaned, polished, and checked for other dust particles. Any particles on the glass while the glass is heating could cause cracks, so it's important to remove any stray traces.

At this point, the mold is preheated and is removed from the kiln. The glass is then placed on top of it, and the whole thing is loaded back into the kiln. Once the kiln reaches the desired temperature — about 1000degrees C — the molecules in the glass begin to speed up and it begins to melt and bend, melding into the shape of the mold. The kiln is very slowly

cooled down, completing the curved glass.



# How do we produce laminated curved glass for the glass guardrails?

Using two panels of 10mm curved glass laminated by a 2.28mmPVB interlayer, the laminated process is undergoing a high temperature and high-pressure autoclave for over 6 hours. After laminating process, the bonding between glass and the PVB will be permanently together.

The interlayer acts to hold the glass together in the event of a breakage, therefore the glass will tend to adhere to the interlayer and not fall apart, protecting it from personal injuries.

#### Advantage of curved glass railing

- 1. Good decorative effect: Curved glass is a creative form. Shenzhen Dragon Glass can also supply curved glass in many colors, thicknesses and radius are so almost anything are achievable. Even a variety of the available Interlayers makes interesting decorative but also functional possibilities.
- 2. **Custom-made:** Curved glass can be applied in an interesting way, it is custom made for each project and as such can be produced to meet a variety of designs, whether this is a complex curve with flat tangents or a straightforward cylindrical curve.
- 3. **Super safe:** Laminated curved glass protects from personal injuries, if the glass is broken, the shards will adhere to the interlayer and do not fall apart. Even possible to build multi-layer glasses for various, demanding protection needs.
- 4. **Strong pressure resistance**: Not only that, the arching actually makes it highly load resistant. When used properly, they can reduce the use of other building materials.



# Specifications of 22.28mm glass panel railing

- Glass thickness: 10mm+10mm, other thicknesses such as 5mm+5mm, 6mm+6mm, 8mm+8mm, etc also available;
- Glass shape: Curved. The flat shape is available;
- Min Radius: 200mm for hot bending curved laminated glass. 900mm for the <u>curved tempered process</u>.
- Max Arch: 3300mm, Height 3300mm, etc.
- Further process: Digital printing, ceramic frit printing, low e coating, acid etching or sandblasting, etc;
- Production time: 20 days after order confirmed;
- Certifications: CCC/CE/SGCC/IS09001/AS, etc.
- Packing: Strong plywood crates packing

### Quality

- Subject to CE;
- Subject to BS;
- Subject to ASTM;
- Subject to ISO9001, etc.

### Packing & delivery



Strong plywood crates packing and delivery.

<u>Shenzhen Dragon Glass</u> are total glass suppliers that supply

curved glass ranging from toughened glass through to highperformance laminates all of which can be curved to your individual needs.

<u>Contact us</u> and see if we can help you to find the perfect options for your curved glass.