Hot Bending Glass process for Unbelievable Architectural Curved Glass



What's great about today's technology is that it allows us to push the known limits into exciting, unknown territory. The hot bending glass technology is innovative, allowing for studying and creating truly life-changing designs. This is what we are starting to see in the form of curves and shapes in the field of glass architecture. And as the latest architectural design trends suggest, the world is ready for curved glass.



Hot bending process

Cutting and Edging

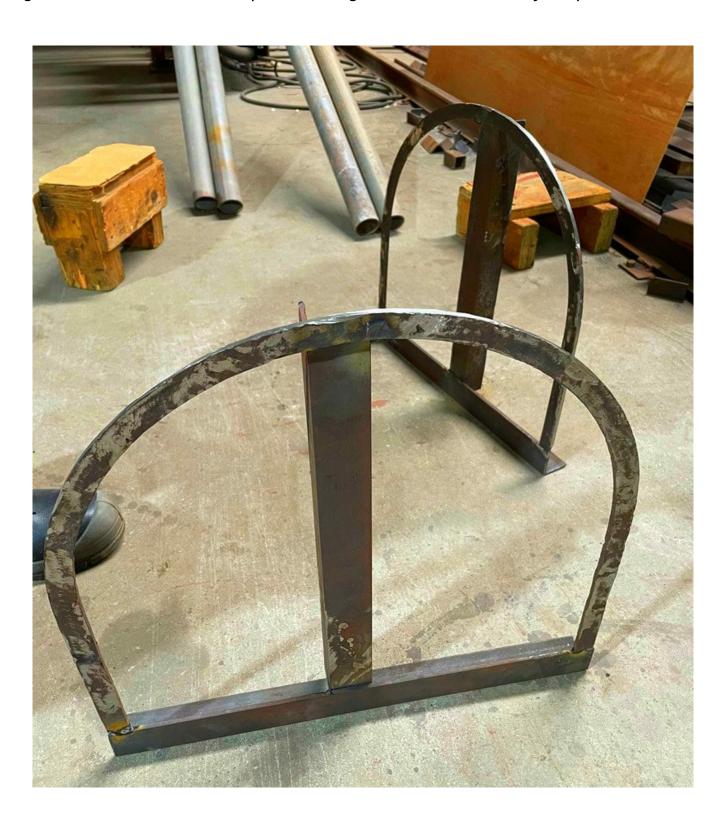
When float glass comes off the manufacturing line it is a flat sheet. Large sheets of glass are scored into a range of enduse sizes. After that, these individual pieces of glass are edged on a vertical line and sent to an industrial washer.



Curved glass mold

The hot bending process usually begins with steel pieces. That

forms a mold as a baseline for the 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 disparities between the mold and the glass could cause the glass to shatter, so preheating the mold is very important.



Hot bending

After the mold is preheated and removed from the kiln, the glass is placed on top of it, and the whole thing is loaded back into the kiln. Once the kiln reaches the desired temperature — about 700 degrees C — the molecules in the glass begin to speed up and it begins to melt and bend, bending can be solely based on gravity. Alternatively, the glass bending process can be assisted in which a mechanical bending press forces the glass into a target shape. The shape is then slowly cooled to avoid any residual tension in the glass completing the hot bending glass



Hot bending glass product

We are total glass suppliers who supply bent glass ranging from annealed glass through to high-performance laminates, all of which can be curved to your individual needs. This extends to insulated glass units (IGUs) or double glazed units).

Not only is bent glass a creative form of design for any building, but Shenzhen Dragon Glass can also supply bent glass in many colors, thicknesses, and radius so almost anything is achievable.

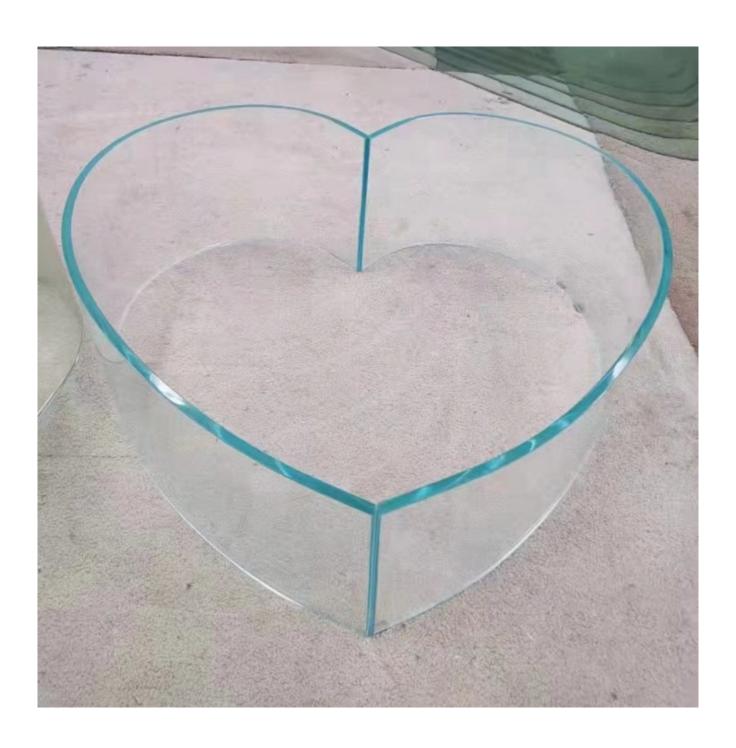
Our custom hot bending glass options include but are not limited to the following glass types

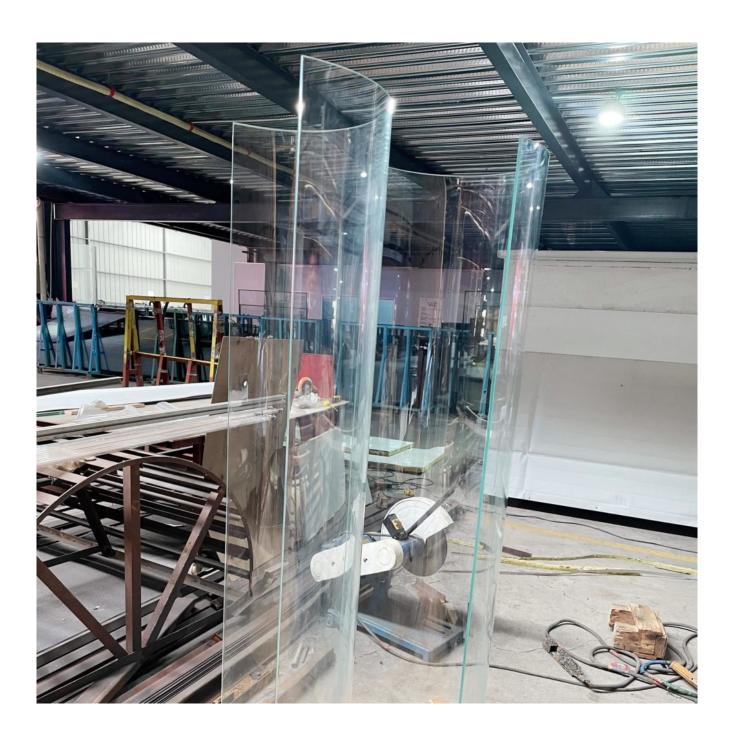
- Annealed Glass
- Heat Strengthened glass
- Electric Glass- switchable glass
- Low-e glass
- frosted glass
- Ceramic Frit Glass including graphic designs and patterns.
- Laminated safety glass including colored interlayer.
- Dupont SGP glass
- Radius is no limit
- Can machine holes, simple cut-outs, and complex cutouts











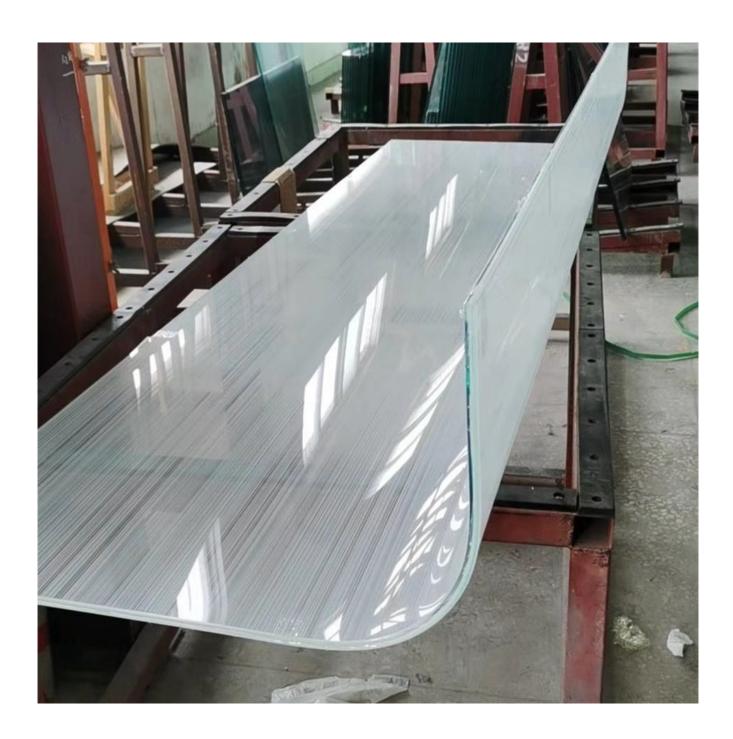












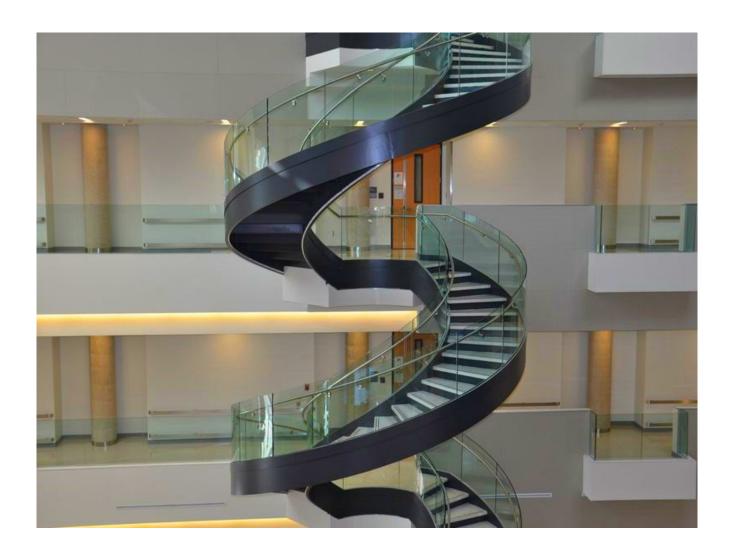


Applications

- hot bent glass for furniture and furniture parts (glass doors, furniture components)
- hot bent glass for furniture component parts in the FMCG industry (refrigerated display cabinets, refrigerators)
- hot bent glass for railings and curved structural
- hot bent glass for elements for supporting staircases
- hot bent glass for shower enclosures and glass doors
- hot bent glass for office space partitions
- hot bent glass for protective glass for revolving doors

- hot bent glass for canopies and skylights
- hot bent glass for shop windows
- hot bent glass for glass curtain walls and windows









Hot Bending Glass VS <u>Curved</u> <u>Tempered Glass</u>

1. Glass bending process:

- The hot bending process is cooled in nature after heating up and does not add mechanical strength to the bent glass nor the ability to tolerate temperature variations.
- The curved tempered glass bending process is cooled rapidly after heating up, making excellent mechanical strength and durability against temperature variations to bent glass.

2. Variety of product shapes:

- Hot Bending glass products have a variety of styles
- Curved tempered glass has a single style, which is only suitable for curved arcs with a radius of more than 900mm.

3. Product safety performance:

- Hot bending glass is unsafe glass, we can laminate it and make it safety glass.
- Curved tempered glass is safety glass.

4. Product reprocessing:

- After the hot bending process, bent glass products can be processed by cutting, drilling holes, etc.
- Curved tempered glass has no secondary processing capability.

Packing and Delivery

There are thick foam pads to prevent the glass from banging around inside the case[



Sturdy plywood crates to ensure safety during long-distance transportation

☐



<u>Shenzhen Dragon Glass</u> are curved and bent glass specialists, offering a range of curved glass options for the worldwide market. We can contribute at the design, specification, and tender stages to ensure the successful integration of curved glass into any sized project.

Tell us about your needs and we will find a solution. Fill out the contact form below. We will respond within 24 hours.