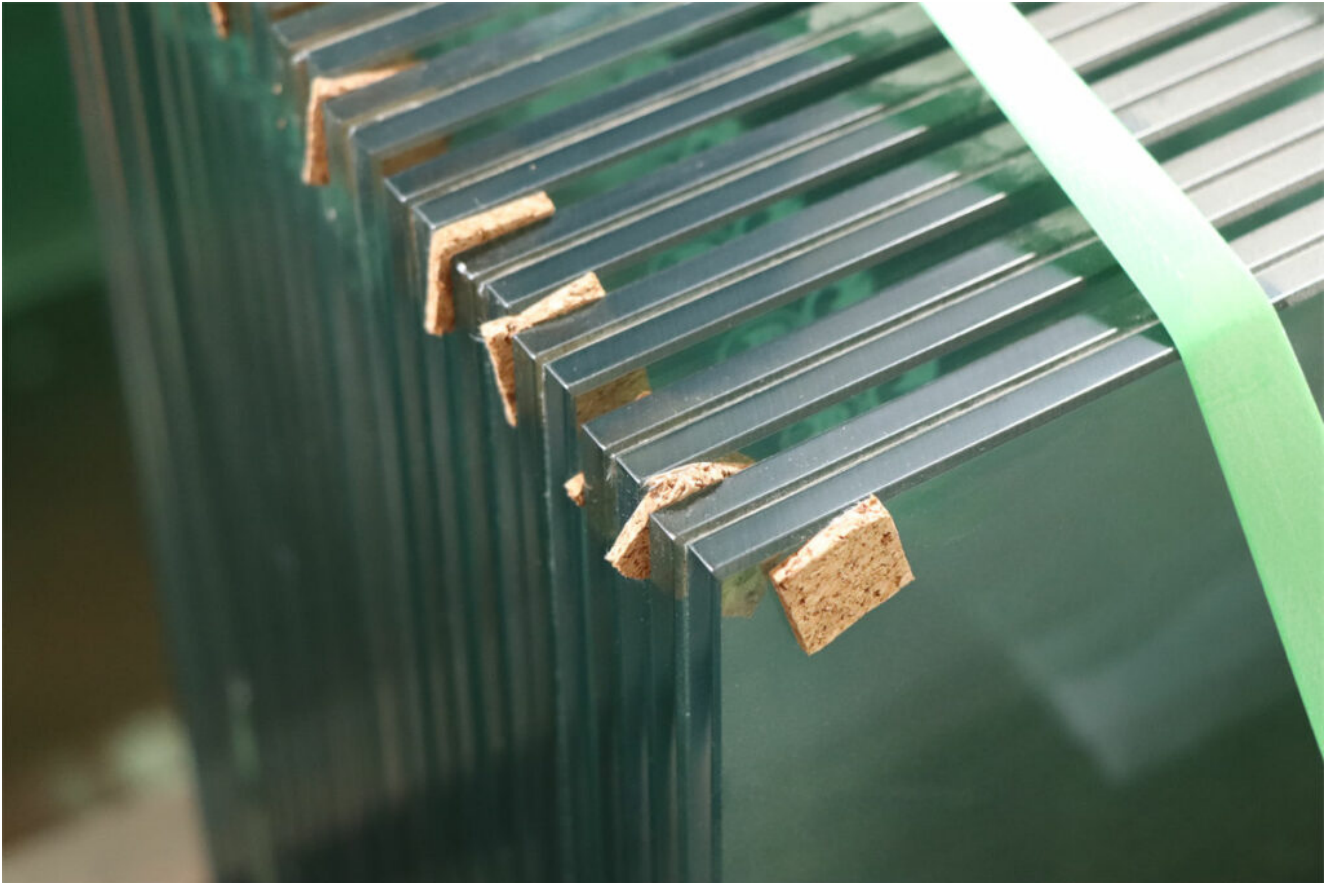
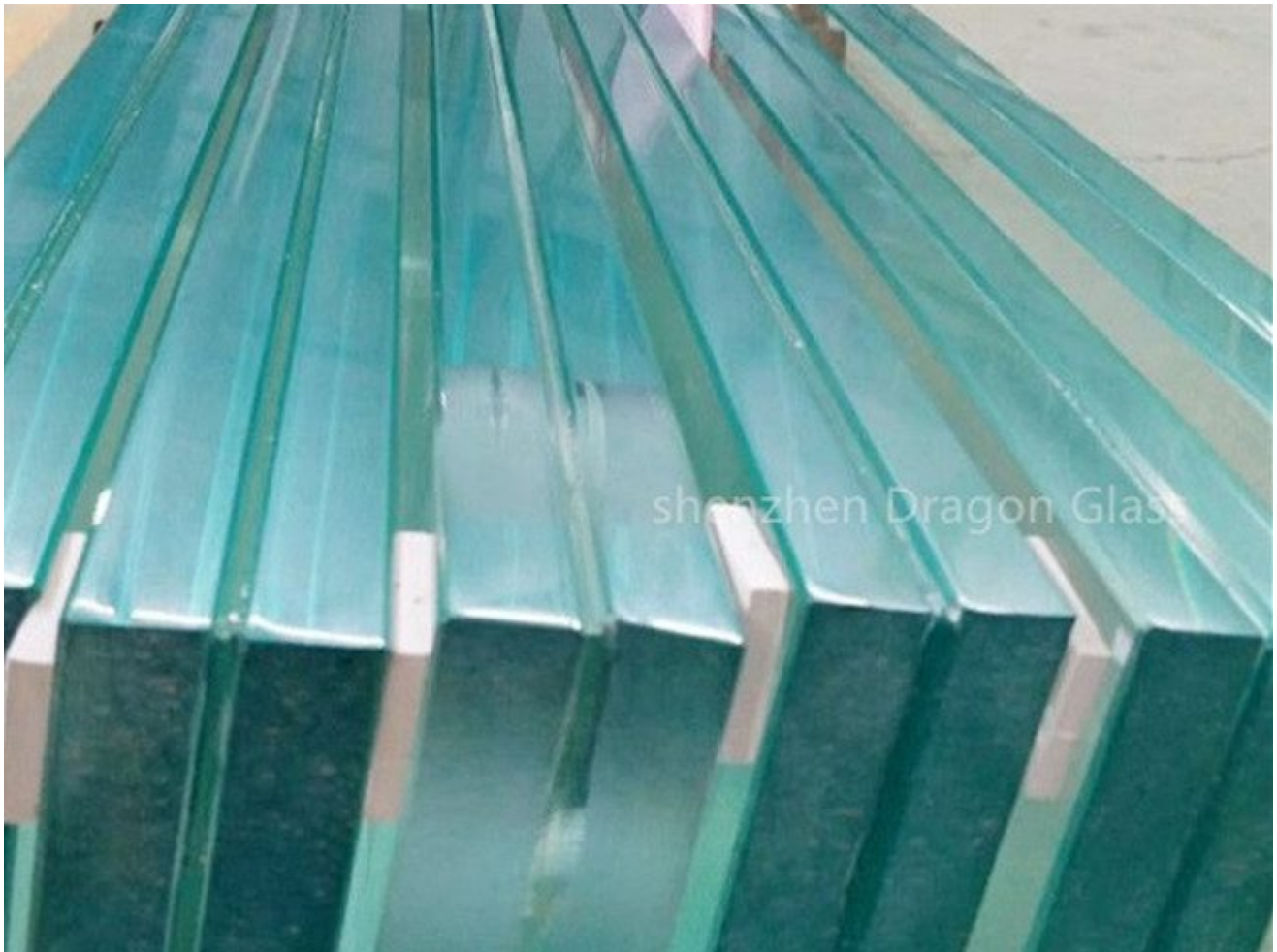


High Safety EN12600 10104 Harden Laminated Glass for Railing



**What is 10104 Harden Laminated
Glass?**



10104 Harden Laminated Glass is a specific type of laminated glass designed for use in applications where safety, security, and durability are paramount. 10+10mm Laminated glass typically consists of two 10mm toughened glass bonded together with PVB interlayer.

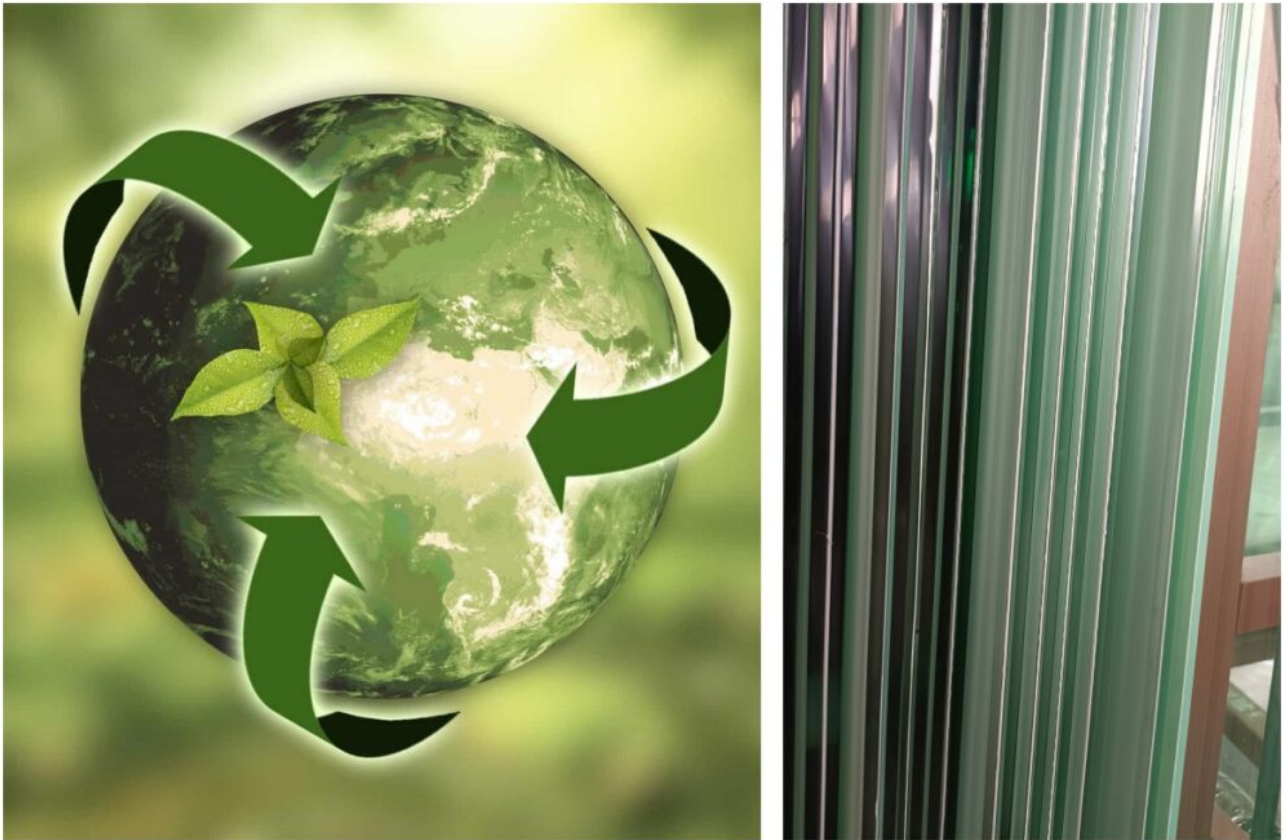
Applications for this type of glass include building facades, skylights, railings and safety windows in various settings.

Because if this type of glass breaks, the small shards will adhere to the PVB film, preventing secondary injury. This is why [10+10mm tempered laminated glass](#) is the safest glass in the world. Today, let's discuss the features of this glass when used in railing projects.

2- Why use 10+10mm tempered laminated glass for railing?

(1) 10104 VSG Glass railings are environmentally friendly:

People who are concerned about the environment need not worry. Glass railings are eco-friendly and recyclable. If the laminated glass breaks, it can be recycled and made into new glass, aligning with sustainable development.



Environmentally friendly for laminated glass as railings

High Safety Characteristics

21.52 mm tempered laminated glass has a very high level of safety. People have a bias against glass, thinking it poses potential risks. There is no need to worry. Unless the situation is extreme, tempered laminated glass is very difficult to break. Even if it does break, the fragments are not sharp and are less likely to cause harm to the human body.

10104 hardened laminated glass break testing

Good View for Railing

Compared with other materials, glass has a better vision and decorative effect. The normal transmittance of 10104 VSG can reach 84%. If [ultra-clear glass](#) is used, the luster will be better.



Nice view when you installed the 10104 VSG glass railing

Easy to Maintain and Clean

It is easy to clean. If the glass railing gets damaged or scratched, you can easily restore its original beauty by polishing it. This is an important advantage that wood or metal cannot compete with.



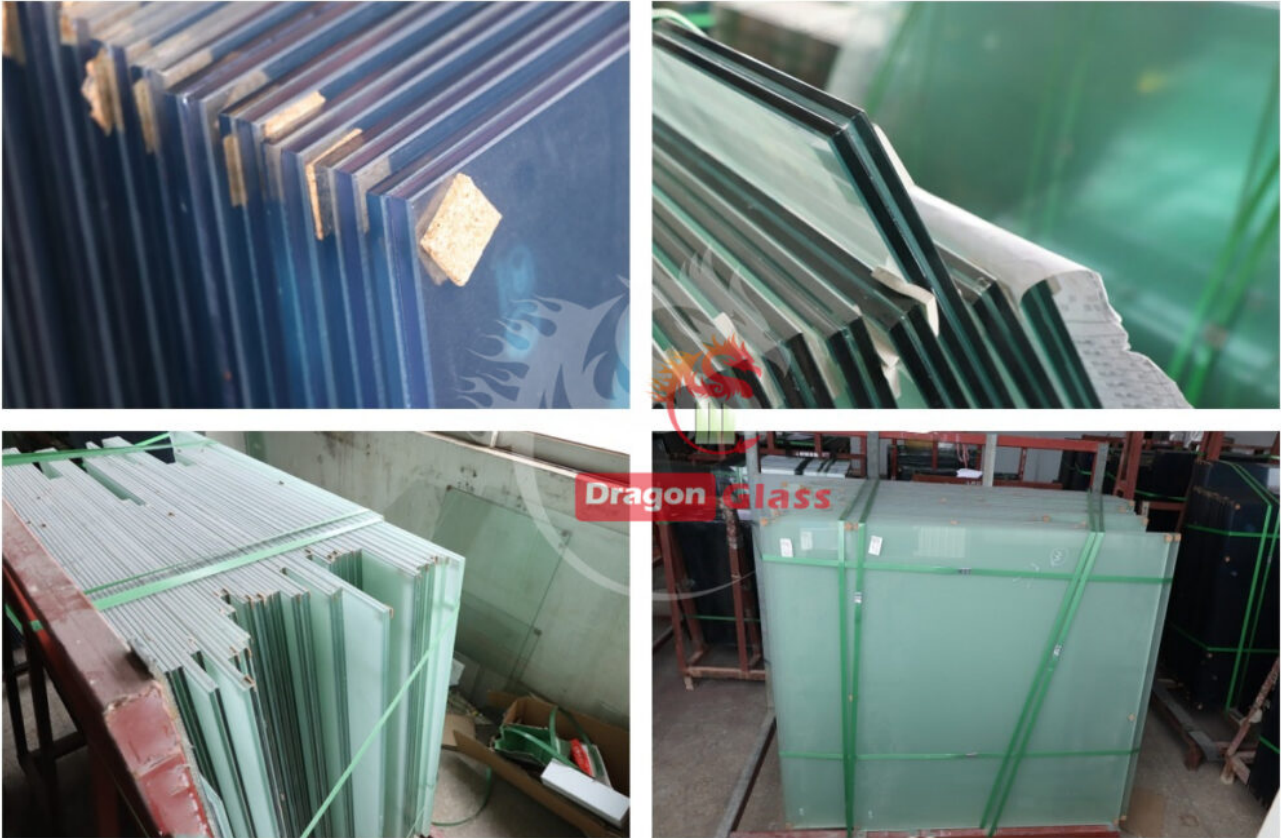
The client maintains the glass railing easily

Available Colors Choices of 10104 VSG glass

The PVB color for 1010.4 VSG glass can be customized anytime for your projects. We support [RAL/Panton color](#), or Vanceva glass number to meet your requirements.



Our stock PVB color VSG for reference



Different colors for vsg glass

3- Specification of 10104 VSG laminated glass

Product name	10104 VSG glass, 21.52mm toughened laminated glass, 10+10mm laminated tempered glass
Thickness	10mm tempered glass + 1.52 PVB + 10mm toughened glass – 7/8 thick
Size range	Customized, for railing we suggest the size less than around 1000x2000mm
Color choice	Normal clear, ultra clear, or other PVB color, like red, yellow, blue, pink, green
Shape choice	Shaped, curved, flat

Customized	Polished edge, drill holes, cutout, cut notches, safety corner, etc.
Delivery time	around 15-20 days
Trade term	EXW, FOB, CIF, DDP, DDU

4-Quality control for 21.52mm tempered laminated glass

Nowadays, 10+10mm toughened laminated glass is widely used in construction, and controlling the quality of glass railings is very important. The toughened laminated glass produced by [Dragon Glass](#) meets the following standards:

- Subject to **BS standard**
- Subject to **SGCC-ANSI Z97.1 standard**
- Subject to **ASTM C1172 standard**
- Subject to **CE- EN12543, EN14449 standard**
- Subject to the **ISO 9001 standard**
- Subject to the **AS/NZS 2208:1996 standard**

Certificate NO.: LBTC2104201395

Declaration of Conformity

The following product has been assessed by us with the listing standards and found in conformity with the EC Council Regulation of (EU) No 305/2011. It is possible to use **CE** marking to demonstrate the compliance with this CPR Regulation.

Report No. : LBTR2104201395

Applicant : Shenzhen Dragon Glass Co., Ltd
Address : C108, Yunhai enterprise headquarters base No. 42 Caiyun Road, Jixiang community, Longcheng street, Longgang District, Shenzhen City, China



Manufacturer : Shenzhen Dragon Glass Co., Ltd
Address : Yunhai enterprise headquarters base No. 42 Caiyun Road, Jixiang community, Longcheng street, Longgang District, Shenzhen City, China

Product Name : Tempered glass
Trade Name : N/A
Model No. : 4mm, 5mm, 6mm, 8mm, 10mm, 12mm, 15mm, 19mm.

EC Directives : CPR Regulation (EU) No 305/2011
Test Standards : EN 12150-1:2015
EN 12150-2:2004

The referred test report(s) show that the product complies with the essential requirements in the above listed standards. The applicant is authorized to use this certificate in connection with the EC declaration of CPR conformity according to the Regulation.

The CE marking as shown below can be affixed on the equipment after the preparation of the necessary technical documentation as well as the conformity declaration by the manufacturer. Whereas the Manufacturer is responsible for the certification of the product(s) and not exempted from performing all the necessary activities before placing the product(s) on the market. The Manufacturer is also responsible for the internal production control to ensure the product(s) are in compliance with the essential requirements of the above mentioned Regulation(s).

Date of Issue: Apr 25, 2021

This statement is based on a single evaluation of the sample(s) of above mentioned product. It does not imply an assessment of the whole production.

LABTEST TECHNOLOGY LABORATORY LTD
 Minhua Pukyo Bio Park, Jinxu Road, Pingshan, Shenzhen, CHINA. <http://www.labtest.com>

Certificate NO.: LBTC2104201405

Declaration of Conformity

The following product has been assessed by us with the listing standards and found in conformity with the EC Council Regulation of (EU) No 305/2011. It is possible to use **CE** marking to demonstrate the compliance with this CPR Regulation.

Report No. : LBTR2104201405

Applicant : Shenzhen Dragon Glass Co., Ltd
Address : C108, Yunhai enterprise headquarters base No. 42 Caiyun Road, Jixiang community, Longcheng street, Longgang District, Shenzhen City, China



Manufacturer : Shenzhen Dragon Glass Co., Ltd
Address : Yunhai enterprise headquarters base No. 42 Caiyun Road, Jixiang community, Longcheng street, Longgang District, Shenzhen City, China

Product Name : Laminated (Safety) Glass
Trade Name : N/A
Model No. : 3mm+0.76PVB+3mm, 4mm+0.76PVB+4mm, 6mm+1.52PVB+6mm, 8mm+1.52PVB+8mm, 10mm+1.52PVB+10mm, 12mm+1.52PVB+12mm, 15mm+1.90PVB+15mm, 19mm+3.04PVB+19mm.

EC Directives : CPR Regulation (EU) No 305/2011
Test Standards : EN ISO 12543-3:2011
EN ISO 12543-3:2011

The referred test report(s) show that the product complies with the essential requirements in the above listed standards. The applicant is authorized to use this certificate in connection with the EC declaration of CPR conformity according to the Regulation.

The CE marking as shown below can be affixed on the equipment after the preparation of the necessary technical documentation as well as the conformity declaration by the manufacturer. Whereas the Manufacturer is responsible for the certification of the product(s) and not exempted from performing all the necessary activities before placing the product(s) on the market. The Manufacturer is also responsible for the internal production control to ensure the product(s) are in compliance with the essential requirements of the above mentioned Regulation(s).

Date of Issue: Apr 25, 2021

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LABTEST TECHNOLOGY LABORATORY LTD
 Minhua Pukyo Bio Park, Jinxu Road, Pingshan, Shenzhen, CHINA. <http://www.labtest.com>

SGCC
 safety glazing certification council

Administrative Office, AMS, Inc.
 205 West Main Street, PO Box 730
 Sacketts Harbor, NY 13655
 Phone: (315)646-2234
 E-mail: staff@amsccf.com

ACKNOWLEDGEMENT OF CERTIFICATION

THIS IS TO ACKNOWLEDGE THAT AS OF THIS DATE
 Shenzhen Dragon Glass Co., Limited
 Shenzhen, Guangdong

IS A CURRENT LICENSEE AND HAS MET ALL GUIDELINES AND REQUIREMENTS FOR THE SGCC® CERTIFICATION PROGRAM AND AS SUCH IS ELIGIBLE TO LABEL THE BELOW INDICATED PRODUCT(S) AS SGCC® CERTIFIED. REPRESENTATION SAMPLES OF THE BELOW PRODUCTS HAVE BEEN FOUND TO BE IN COMPLIANCE WITH ANSI Z97.1-2009 OR 2015 AS INDICATED, CPSC 16 CFR 1201 STANDARDS, OR BOTH STANDARDS, KNOWN AS COMPOSITE CERTIFICATION (COMP), OR BOTH STANDARDS WITH CAN/CGSB 12.1 KNOWN AS COMP+CAN.

SGCC#IN	MM	Attributes	INT	Type Code	Max Size	ANSI Class	Test Std	Year	
4303	5/32	4		TTG	U	A	COMP+CAN	2009	
4304	3/16	5		TTG	U	A	COMP+CAN	2009	
4305	1/4	6		TTG	U	A	COMP+CAN	2009	
4306	5/16	8		TTG	U	A	COMP+CAN	2009	
4307	3/8	10		TTG	U	A	COMP+CAN	2009	
4308	1/2	12		TTG	U	A	COMP+CAN	2009	
4309	*	15	(3)	TTG	U	A	COMP+CAN	2009	
4310	3/4	19		TTG	U	A	COMP+CAN	2009	
4312	(H)	8-16+	(H)(A)	(030)	LTG	U	A	COMP+CAN	2009
4575	(H)	10-16+	(H)(A)	(060)	LTG	U	A	COMP+CAN	2009
5052	1/4	6		TBG	U	A	COMP+CAN	2009	
5053	5/16	8		TBG	U	A	COMP+CAN	2009	
5054	3/8	10		TBG	U	A	COMP+CAN	2009	
5055	1/2	12		TBG	U	A	COMP+CAN	2009	

THIS SGCC® PROGRAM CERTIFICATION IS CURRENT AND IN FULL EFFECT AS OF THIS ISSUE DATE. CERTIFICATION IN THE SGCC® PROGRAM IS SUBJECT TO SEMI-ANNUAL RENEWAL. PLEASE CHECK THE SGCC WEBSITE AT WWW.SGCC.ORG OR THIS OFFICE FOR MOST CURRENT INFORMATION.

Thursdays, July 14, 2019
 DATE OF ISSUE

1.15
 CERTIFICATION PERIOD

Administrative Manager

NS-03 Last Revised By: KJ-0111 Last Approved By: KJ-0111

SCHEDULE TO STANDARDSMARK LICENCE

Dragon Glass

SAI Global hereby grants
 Shenzhen Dragon Glass Co., Ltd.

Yunhai enterprise headquarters base, No. 42 Caiyun Road, Jixiang community, Longcheng street, Longgang District, Shenzhen, Guangdong, China, 518172

StandardsMark Licence

Manufactured to **AS/NZS 2208:1996 - Safety glazing materials in buildings**

Model identification of the goods on which the STANDARDSMARK may be used:

Description	Type of Safety Glass	Glass Thickness Range (mm)	Contours	Grade	Furniture / Laminating Line	Maximum Loading / Laminated Size	Interlayer / Organic Film Manufacture	Interlayer / Organic Film Thickness	Date Endorsed
Fish-Plan	Heat Strengthened Laminated	10 - 24	Clear	A	Laminated Line 1	2440mm x 8000mm	Kingshead Trefoil	Clear PVB 1.52mm	8 Dec 2023
Fish-Plan	Laminated	8 - 18	Clear	A	Laminated Line 1	2440mm x 8000mm	Kingshead Trefoil	Clear PVB 1.52mm	8 Dec 2023
Fish-Plan	Toughened	5 - 19	Clear	A	Furniture 1	2440mm x 8000mm			8 Dec 2023
Fish-Plan	Toughened Laminated	10 - 30	Clear	A	Laminated Line 1	2440mm x 8000mm	Kingshead Trefoil	Clear PVB 2.28mm	8 Dec 2023

End of Record

Certificate No: SSM41413
 Issued Date: 14 December 2023

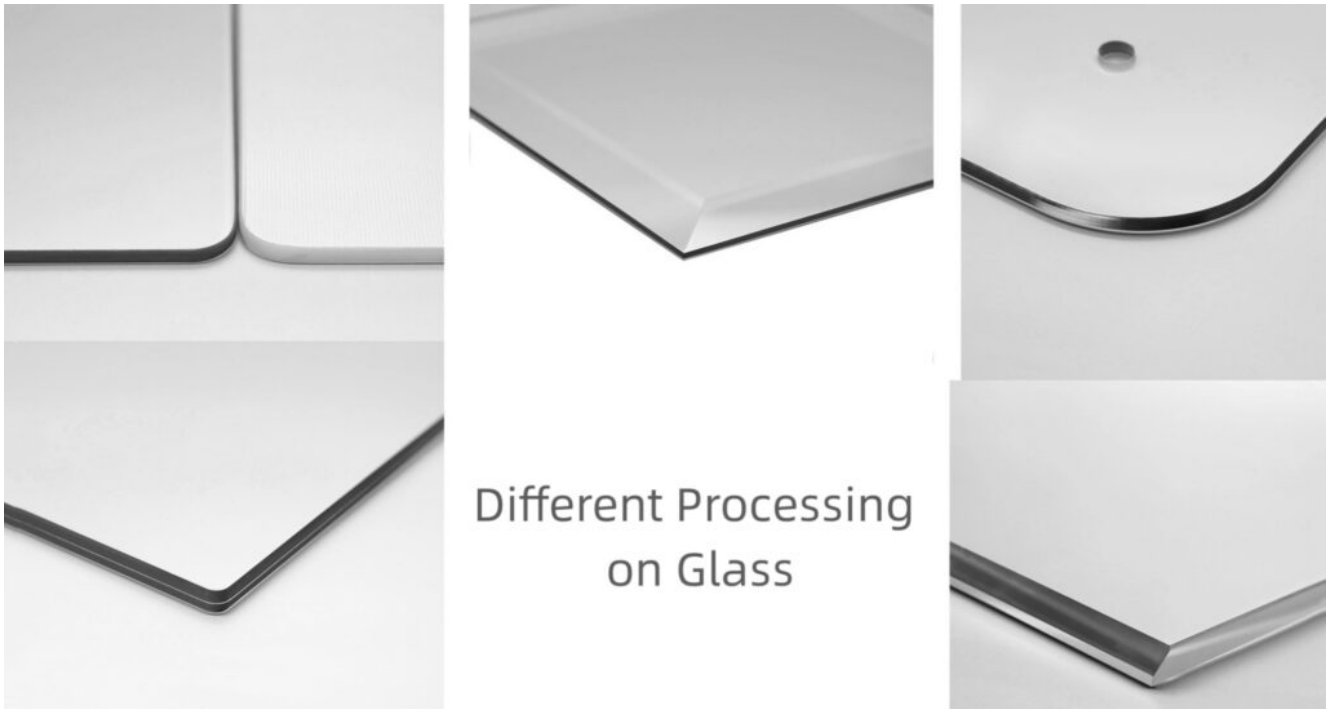
This schedule supersedes all previously issued schedules

* For details of manufacture, refer to the licensee
 The STANDARDSMARK is a registered certification trademark of SAI Global Pty Limited (A.C.N. 109 044 942) and is issued under license by SAI Global Certification Services Pty Limited (A.C.N. 128 716 667) SAI Global (Level 7 Suite 7.05, 41 Cassara Street, Sydney NSW 2000 Australia. This certificate remains the property of SAI Global and must be returned to SAI Global upon its request. Refer to www.sai-global.com for the list of product models.

SAI GLOBAL
 safety glazing certification

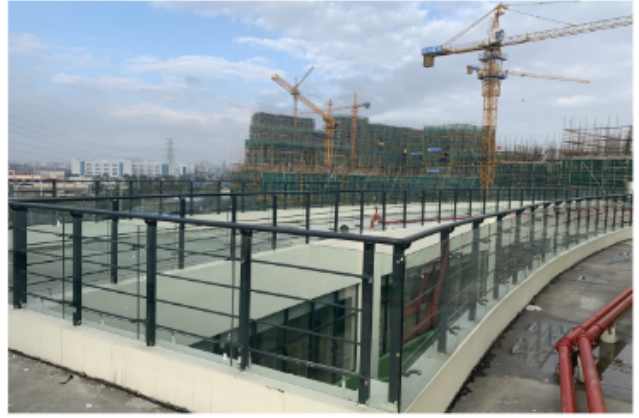
Processing notice for 10104 harden laminated glass

All processing such as polished edges, rounded corners, drilling, notches, and grooves must be completed before tempering and laminating.



5- Applications

Besides glass railing, they can still be used for balustrades, terraces, balconies, swimming pool fences, guillotine glass, and so on.



Different glass railing projects

6- Processing details for 10104 VSG glass

Cutting line

[Dragon Glass group](#) has over 7 cutting lines, including Bottero, Lisec auto cutting line, CNC cutting line, and so on, according to the customer's CAD drawing, our professional team will try our best to help you with your railing glass sizes and shapes.



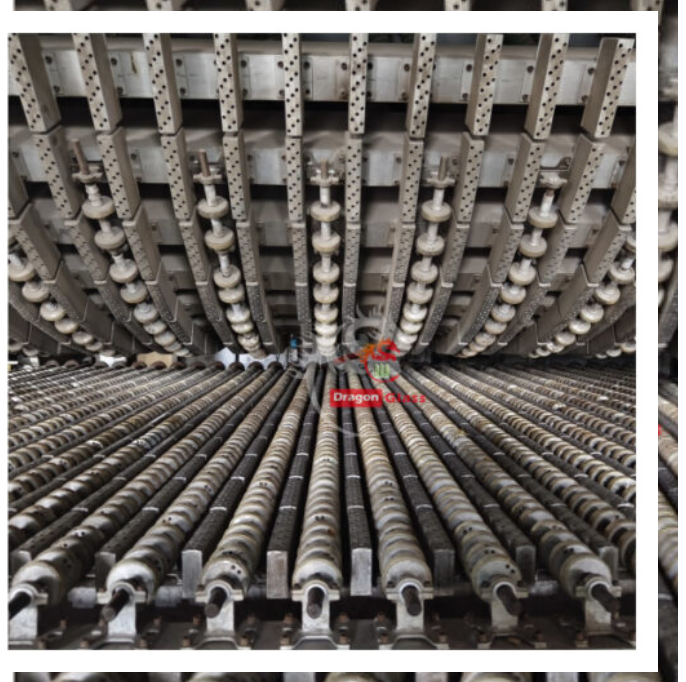
Edging line

Support over 12 types of edge polishing items, including Flat polished, beveling, and round edge, no matter whether building glass, or [furniture glass](#) edges or if you have other glass requirements, kindly [contact our team](#).



Tempering & bending processing line

Besides flat toughened glass, we also can curve the glass panel, to ensure safety and durability, you will get very nice quality [curved toughened glass](#).



Pre-laminating line

The professional workers will transfer and combine two panels of [10mm toughened glass](#) (3/8 toughened glass) with interlayers 1.52 PVB (0.06"), and make a pre-laminate before high temperature and pressure.



Autoclave laminating Line

All the laminated glass will be moved to the Autoclave from Dragon Glass, and after hours of high temperature and pressure, which is cooling, it will be moved to the inspection room for our QA & QC checking.



7. Packing and Delivery

Strict inspection for laminated glass before delivery,

In every step of the production process, a light needs to be shined on the glass to ensure that there are no scratches, bumps, or watermarks.



Laminated glass inspection by flashlight in Dragon Glass



Safety packing for laminated glass 10104 VSG

10104 VSG glass is a nice option for balustrade projects worldwide, it is extremely cost-effective and for railing projects, the size variations are small, so production time can be faster.

Please don't miss this opportunity to place your order, we can deliver it very soon to your hand. [Contact us now!](#)