

Elegant designs 6+1.52pvb+6 13.52mm tempered laminated glass railing for staircase with good price

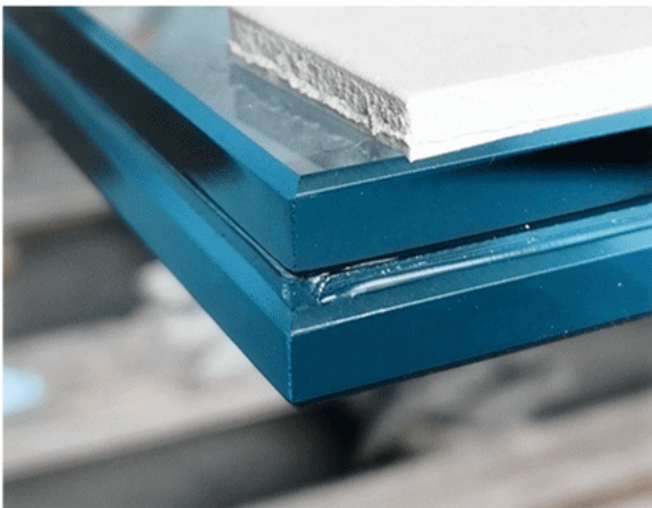
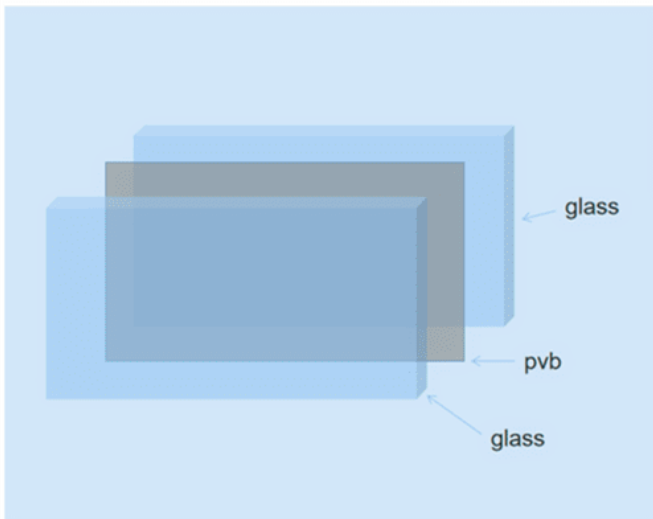


Nowadays glass products have been adopted by many architects for residential and commercial applications. [Tempered laminated glass](#) for staircase not only can provide super high strength and safety function, but also can provide a good sense of space and modern design. In this article, we are going to introduce you to our tempered laminated glass railing for staircase.

1, What is 6+1.52PVB+6 tempered

laminated glass railing for staircase?

6+1.52PVB+6 tempered laminated glass railing for staircase is using two 6mm thickness tempered glass panels laminated together with 1.52PVB interlayer. Enduring high temperature and high pressure in lamination autoclave for over 6 hours, then the combination of glass and the PVB interlayer is permanently together. Staircase with glass railing can provide you super safety and let you have a great feeling of simplified modern design.



Staircase with glass railing

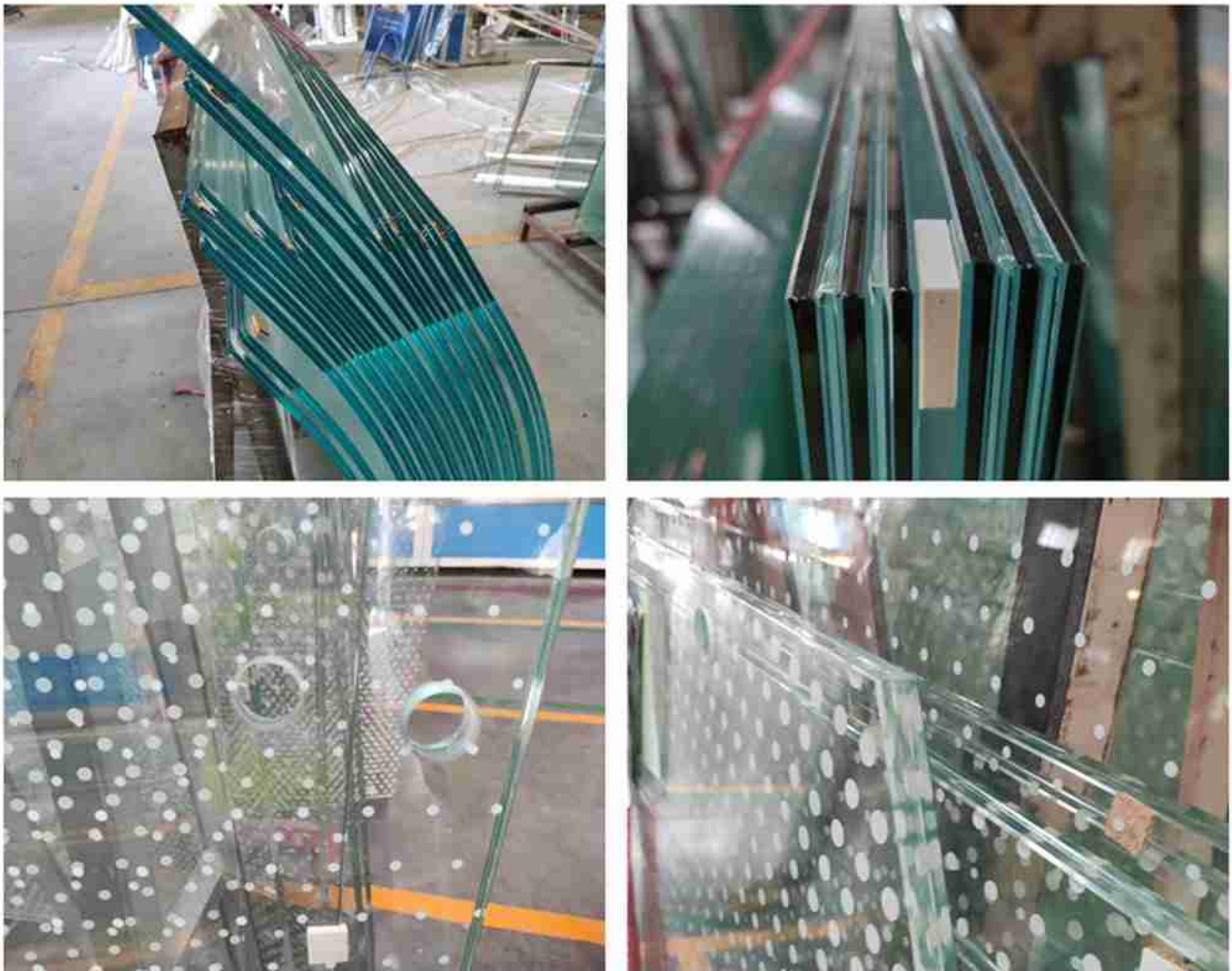
2, Why use 1.52PVB for tempered laminated glass railing for staircase?

You may wonder, why to use 1.52pvb for laminated glass railing, not 0.76pvb or 1.14pvb or even 2.28pvb or thicker? Well, glass railing staircase is directly human touched place, therefore safety and high strength are considered as important as the modern elegant design for commercial or residential applications.

1.52PVB is suggested for staircase with glass railing because:

1. Tempered glass has deformation after high temperature and has the roller wave. For two tempered glass panels, the thicker of the PVB interlayer, the better for the PVB material to penetrate into space of the deformation or roller waves of tempered glass, therefore 1.52 will be a balance option for high strength and safety and long lifespan option;
2. Mostly stairs with glass railing will adopt bolts joining the laminated glass together with the structural support. When holes exist, there are higher risks of delamination, therefore thicker PVB will be suggested. 1.52PVB is a better choice than 1.14PVB;
3. Of course, thicker pvb might provide you higher anti-impact function. But it is not the thicker, the better. When the PVB thickness is too much, the laminated glass will turn to a yellow appearance because PVB material has a yellow index. Moreover, the thicker PVB, the more expensive. For stairs with glass railing, size and

thickness and holes drilling, etc technical data requirement, 1.52PVB are safe enough and economical option.



Laminated glass railing for staircase

3, 13.52mm tempered laminated glass railing for staircase properties:

Product name	Staircase with glass railing/stairs with glass railing
Glass thickness	6mm+6mm, other thickness available as well.

Glass colors	Clear, other options like low iron, tinted, are available.
Interlayer	1.52PVB, if you need 1.52SGP or EVA material, we can provide as well. We Shenzhen Dragon Glass are one of the certified SGP suppliers .
PVB color	Clear, other options such as milky white, pink, green, blue, bronze, yellow, purple, etc are customizable.
Further process	drilling, edging, digital printing , ceramic frit , heat soaked test , etc.
Glass shape	Parallelogram shape/rectangle shape/curved shape;
Quality	Subject to CE & ASTM high standard.
Packing	Strong plywood crates.
Capacity	2000 SQM/day

4, How to manufacture 6+1.52pvb+6 13.52mm tempered laminated glass?

For [stairs with glass](#) railing designs, there will be parallelogram shape or rectangle shape or curved shape, etc. Generally speaking, the rectangle shape tempered laminated glass production and quality control will be easier because it is manufactured mainly by machines. As below showing:

Raw Material



Bottero-cutting



Grinding



Tempering



Laminating



Packing



Rectangle shape tempered laminated glass production.

Parallelogram shape will be edged by straight line polishing machine. This will have a strict requirement for the operator's experience to control the accuracy of the edging. Other processes will be the same as above. As below picture showing:



Straight line edging machine

Curved shape laminated glass will need [curved tempering](#) and [curved laminated process](#):



Curved tempering



Curved laminating

5, How do we control the quality of the laminated glass railing for staircase ?

We have strict QC team to inspect each process to make sure no flaws during manufacturing.



QC inspection for each process

We also have test lab to make sure the laminated glass has strong anti-impact performance.



Impact testing lab for tempered laminated glass

6, [Shenzhen Dragon Glass](#) as one of the best professional glass railing companies, can offer you several options designs:



Frameless bolts tempered laminated glass railing staircase:



Spigots railing for staircase:



Stainless steel frame railing for staircase:



U channel frameless railing for staircase

7, Certifications

DECLARATION OF CONFORMITY



Certificate NO.: LBTC131122CE

EC Declaration of CPD Conformity

The following product has been tested by Labtest Technology Laboratory Ltd. with the following standards and found to conform with the EC Council Directive of 89/105/EEC. It is possible to use CE marking to demonstrate the conformity with this CPD Directive.

Report No.: LBTC131122CE

Applicant: SHENZHEN DRAGON GLASS CO., LTD

Address: Yuhai enterprise headquarters base, Longcheng street, Longgang District, Shenzhen, China

Manufacturer: SHENZHEN DRAGON GLASS CO., LTD

Address: Yuhai enterprise headquarters base, Longcheng street, Longgang District, Shenzhen, China

Product: Laminated (Safety) Glass

Model No.: Series 1.52+9mm, Series 1.52+10mm, Series 1.52+11mm, Series 1.52+12mm, Series 1.52+15mm, Series 1.52+19mm

Trade Mark: N/A

Test Standards: EN ISO 12543-3:2011, EN ISO 12543-3:2011

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




EN ISO 12543-3:2011

This certificate of conformity is issued as a single evaluation of the submitted samples of the above listed products. It does not imply an assessment of the whole production and other relevant Directives have to be observed.

EN ISO 12543-3:2011



Research Engineering Development Faculty Consultants Limited

96-98 皇后大道中 96-98 皇后大道中

• Tel: (852) 2867-8938 • Fax: (852) 2867-8939

Report R19H01-1A

or

Calibration of Oven No. 3

for

Heat Soak Process for Tempered Glass

to BS EN 14179-1: 2016

and

fulfilling the requirements of

Sections 8.1 & 9.3 of Code of Practice for

Structural Use of Glass 2018 of

Buildings Department of Hong Kong

Prepared for:

Glass Supplier & Glass Fabricator:

SHENZHEN DRAGON GLASS CO., LTD

Yuhai enterprise headquarters base, Longcheng, Longgang District, Shenzhen, China.

Research Engineering Development Faculty Consultants Limited

Valid Period: From 2 August 2019 to 2 August 2021

Issue Date: 2 August 2019



QUALITY MANAGEMENT SYSTEM

CERTIFICATE

Certificate No.: 18730Q11028806

By this certificate the

Shenzhen Dragon Glass Co., Ltd

United solid credit code/Organization code:91440300MA2703811Q

Address: Yuhai enterprise headquarters base, Longcheng, Longgang District, Shenzhen, China

is certified to the

Quality Management System

has been awarded this certificate for compliance with the standard

ISO 9001:2015

The Quality Management System, applied to the following area

Sales of Building Glass (Float Glass, Tempered Glass, Laminated Glass, Insulated Glass, Mirror Glass and Other Building Glass)

Applicable Clause:

Date of Issue: Nov-09, 2018 Date of Validity: 11/09/2019

Surveillance Audit (The first time) Surveillance Audit (The second time) Surveillance Audit (The third time)

[The quality management system is subject to yearly surveillance audit within the period of validity, this certificate is valid only when used together with an Assessment Notice of Surveillance Audit issued by BSI.]

Issued by: [Signature]

This certificate and its relevant information can only be the basis of certification and Accreditation Administration of the People's Republic of China [www.cca.gov.cn]

BSI MEMBER BODY REGISTRATION NUMBER: 18730 Q11028806

Address: 68, Colindale Avenue, London NW9 1HT, UK





IGCC

INTERNATIONAL GLASS CERTIFICATION



IGMAE

INTERNATIONAL GLASS MARKETING ASSOCIATION

ACKNOWLEDGEMENT OF CERTIFICATION

THIS IS TO ACKNOWLEDGE THAT AS OF THIS DATE

Shenzhen Dragon Glass Co., Ltd

Shenzhen, Guangdong

IS A CURRENT LICENSEE AND HAS MET ALL REQUIREMENTS AND REQUIREMENTS FOR THE IGCC/IGMAE CERTIFICATION PROGRAM AND AS SUCH IS ELIGIBLE TO LABEL THE BELOW INDICATED PRODUCTS AS IGCC/IGMAE CERTIFIED. THE FOLLOWING ARE IN COMPLIANCE WITH SET LIST FOR REAL DURABILITY OF INSULATING GLASS UNITS AND RADIANT GAS CONTENT TEST, AND AFTER WEATHERING CYCLE CERTIFICATION REQUIREMENTS ARE INDICATED:

CERT.#	GLASS	SPACER	FRAME CONST.	DESICCANT	SEALANT	DGM
4330	UIG2	MA	BCAGELC	LF	PMS2	NO

THE IGCC/IGMAE PROGRAM CERTIFICATION IS CURRENT AND IN FULL EFFECT AS OF THIS ISSUE DATE. CERTIFICATION IN THE IGCC/IGMAE PROGRAM IS SUBJECT TO SEMI-ANNUAL RE-AUDIT. PLEASE CHECK THE CURRENT CERTIFIED PRODUCTS DIRECTORY ON THIS OFFICE FOR MOST CURRENT INFORMATION.

Issue: February 13, 2019 Edition: 1, 2019, Edition 16, 2019

DATE OF ISSUE CERTIFICATION PERIOD

[Signature]

IGCC/IGMAE CERTIFICATION



SGC

SAFETY GLAZING CERTIFICATION



SGC

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DOCK#IN	MM	Attributes	INT	Frame Code	Max Size	ANSI Class	Test Std	APPROVED YEAR
4300	9-12	A	YES	YES	12	A	SGC+IGMAE	2008
4304	10-16	A	YES	YES	12	A	SGC+IGMAE	2008
4305	14	M	YES	YES	12	A	SGC+IGMAE	2008
4306	16-18	A	YES	YES	12	A	SGC+IGMAE	2008
4307	10	M	YES	YES	12	A	SGC+IGMAE	2008
4308	12	M	YES	YES	12	A	SGC+IGMAE	2008
4309	14	M	YES	YES	12	A	SGC+IGMAE	2008
4310	16	M	YES	YES	12	A	SGC+IGMAE	2008
4311	18	M	YES	YES	12	A	SGC+IGMAE	2008
4312	20	M	YES	YES	12	A	SGC+IGMAE	2008
4313	22	M	YES	YES	12	A	SGC+IGMAE	2008
4314	24	M	YES	YES	12	A	SGC+IGMAE	2008
4315	26	M	YES	YES	12	A	SGC+IGMAE	2008
4316	28	M	YES	YES	12	A	SGC+IGMAE	2008
4317	30	M	YES	YES	12	A	SGC+IGMAE	2008
4318	32	M	YES	YES	12	A	SGC+IGMAE	2008
4319	34	M	YES	YES	12	A	SGC+IGMAE	2008
4320	36	M	YES	YES	12	A	SGC+IGMAE	2008
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4323	42	M	YES	YES	12	A	SGC+IGMAE	2008
4324	44	M	YES	YES	12	A	SGC+IGMAE	2008
4325	46	M	YES	YES	12	A	SGC+IGMAE	2008
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4417	230	M	YES	YES	12	A	SGC+IGMAE	2008
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4419	234	M	YES	YES	12	A	SGC+IGMAE	2008
4420	236	M	YES	YES	12	A	SGC+IGMAE	2008
4421	238	M	YES	YES	12	A		



Strong plywood packing before delivery.

**Do you have any inquiries of the
staircase with glass railing?
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now!](#)**