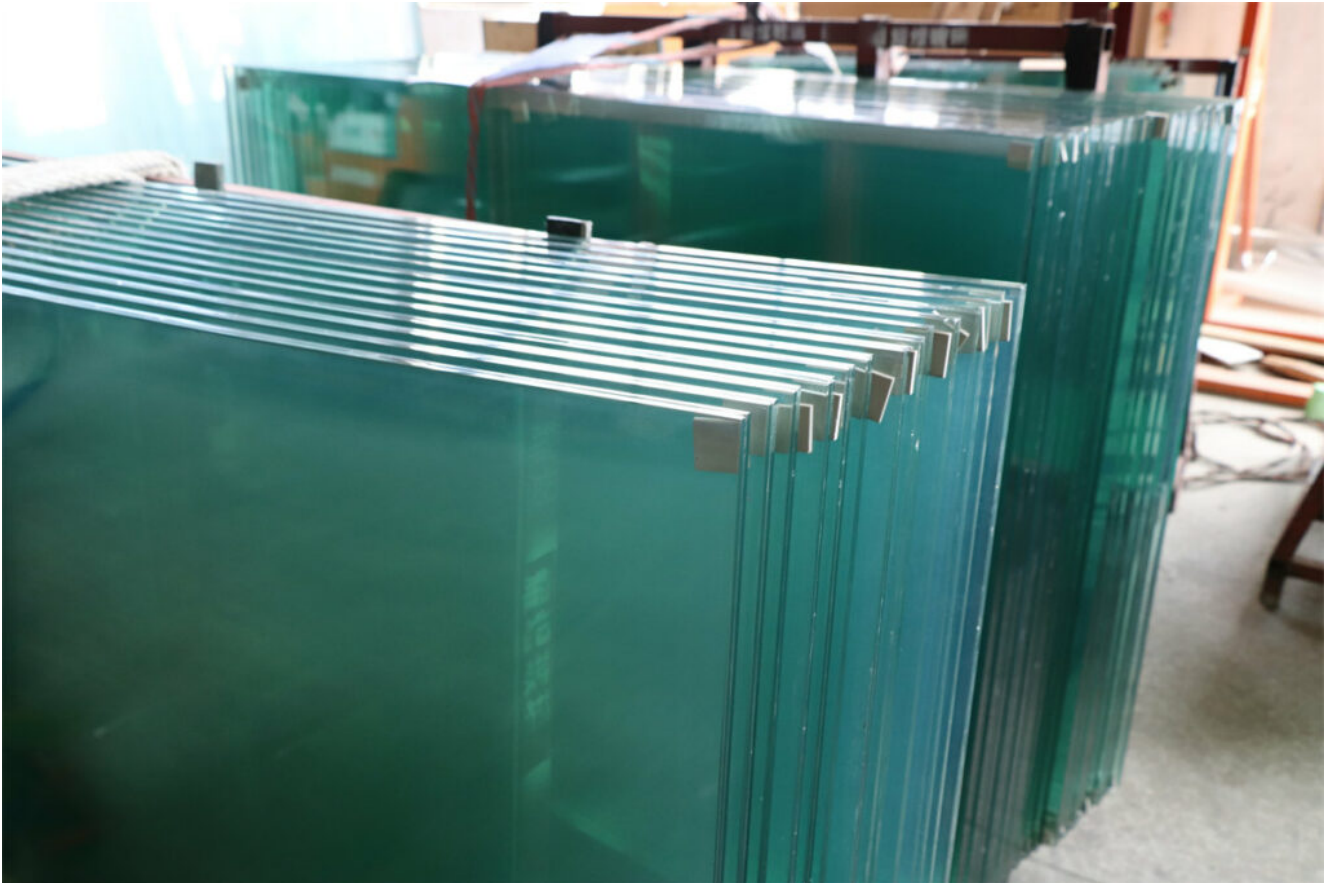
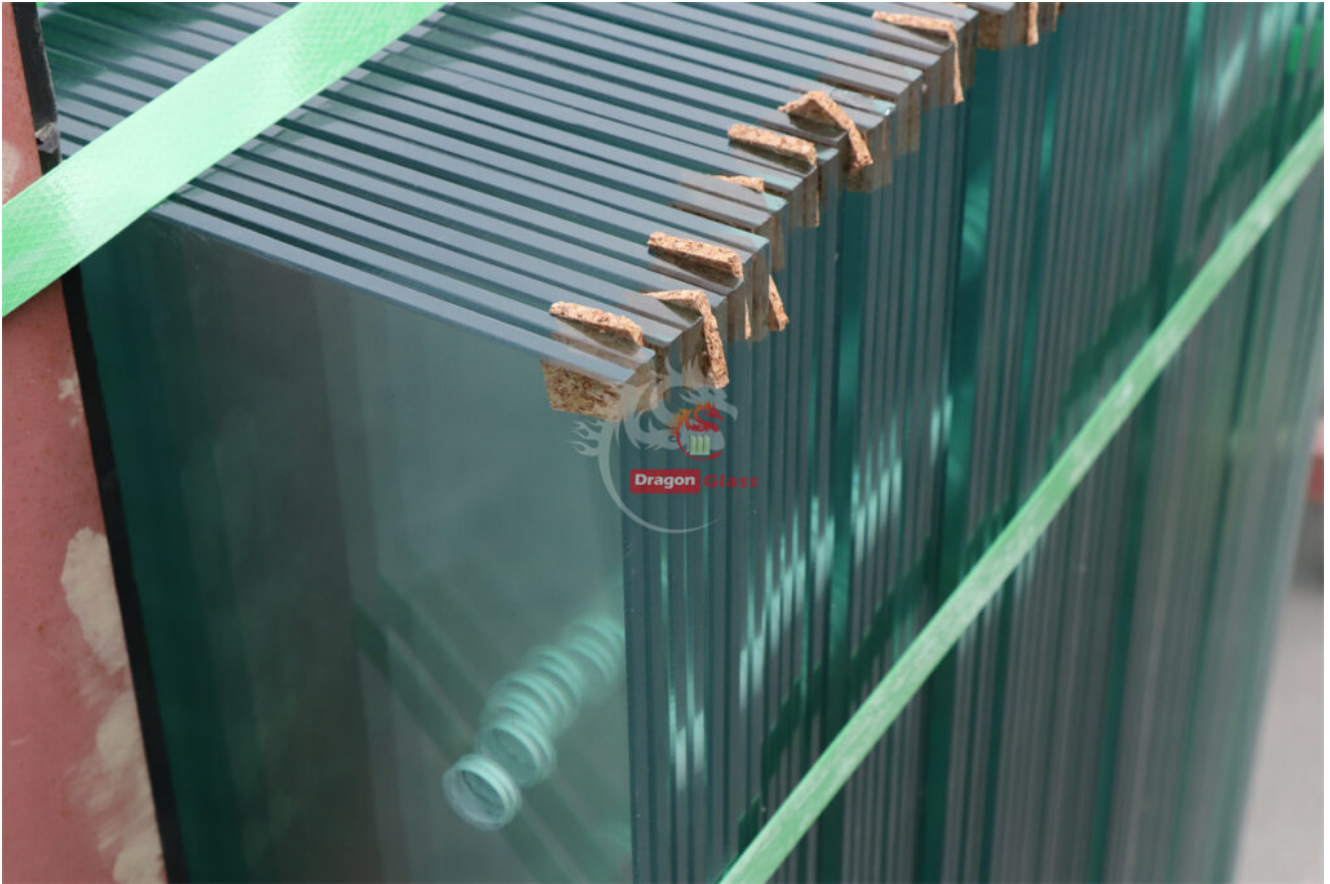


# **Best Selling – 442 VSG 8.76mm Toughened Laminated Glass for Railing**



**1-What is 442 VSG 8.76mm toughened laminated glass?**



442 VSG, 44.2 VSG glass, also called 8.76mm [toughened laminated glass](#), which often uses two pieces of 4mm toughened glass panel after a lamination.

This is a hot-selling item in residential and commercial railing projects, they are hot selling in the Scandinavian areas, compared to [17.52mm VSG](#), which is very cost-effective, so many customers will choose this item.

Besides, we also provide [sheet laminated glass](#) but non-toughened versions, so you can adjust locally for different customized sizes. Available size from 1830x2440mm until 2440x3660mm

## **2- Why use 8.76mm ESG VSG for glass railing?**

### **Safety performance**

When 8.76mm laminated glass railing shatters, the fragments remain adhered to the film and do not fall off. The entire piece of glass retains its shape until it is replaced, thereby reducing the risk of injury.

*Here is a break testing showing monolithic glass and laminated glass*

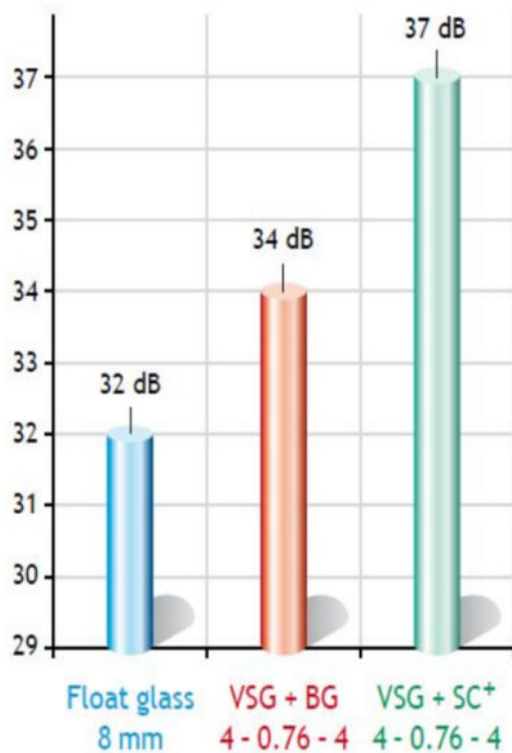
## **Nice View**

Through the 442 VSG toughened laminated glass railing, you can clearly see the outside scenery, the transmission often can reach around 87%.

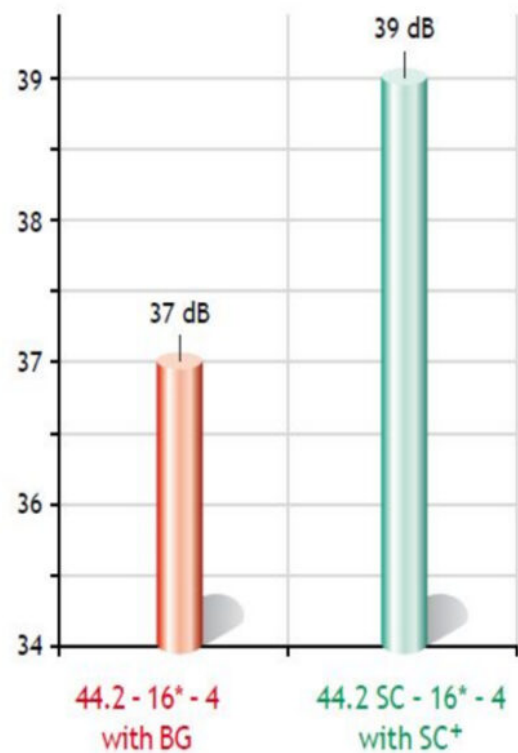
## **Sound insulation performance**

The 8.76mm tempered laminated glass can reduce noise, as the PVB film can block sound to a certain extent. Especially, they use for Guillotine Glass, the noise reduction effects will be better.

Sound insulation [dB]



Sound insulation [dB]



### *Different glass sound insulation performance*

## High strength performance

Compared to [monolithic toughened glass railings](#), the 8.76mm toughened laminated glass is much harder. Because there have two pieces of 4mm glass with PVB film, the anti-impact performance can be significantly improved.

## Other Colors Available

The PVB color can be customized. We support [RAL/Panton color](#), or vanceva glass number to meet your requirements.



*Our stock PVB color VSG for reference*

### 3- Specification of 442 VSG glass

<b>Product name</b>	442 VSG glass, 8.76mm toughened laminated glass, 4+4mm laminated glass
<b>Thickness</b>	4mm toughened glass + 0.76 PVB + 4mm toughened glass
<b>Size range</b>	Normal clear, ultra clear, or other PVB colors, like red, yellow, blue, pink, green
<b>Color choice</b>	Normal clear, ultra clear, or other PVB color, like red, yellow, blue, pink, green
<b>Shape choice</b>	Shaped, curved, flat

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

## **4-Quality control for 8.76mm toughened VSG glass**

Nowadays, 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).

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



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

safety glazing certification council

### 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

L15  
CERTIFICATION PERIOD



ADMINISTRATIVE MANAGER

NS-03 Last Revised By: K9-0111 Last Approved By: K9-0111

### 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	Fumace / 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	Kingshield Trefoil	Clear PVB 1.52mm	8 Dec 2009
Fish-Plan	Laminated	8 - 18	Clear	A	Laminated Line 1	2440mm x 8000mm	Kingshield Trefoil	Clear PVB 1.52mm	8 Dec 2009
Fish-Plan	Toughened	5 - 19	Clear	A	Fumace 1	2440mm x 8000mm		Clear PVB 1.52mm	8 Dec 2009
Fish-Plan	Toughened Laminated	10 - 30	Clear	A	Laminated Line 1	2440mm x 8000mm	Kingshield Trefoil	Clear PVB 2.28mm	2009


End of Record

Certificate No: S9M41413

Issued Date: 14 December 2020

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. 108 716 697) (SAI Global) Level 7 Suite 1.05, 41 Cassara Street, Sydney NSW 2000 Australia. This certificate covers the property of SAI Global and must be returned to SAI Global upon request. Refer to www.sai-global.com for the list of product models.



Processing notice



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

## **5- Applications**

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



*Different glass railing projects*

## 6- Processing details for 442 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 glass sizes and shapes.



## Edging line

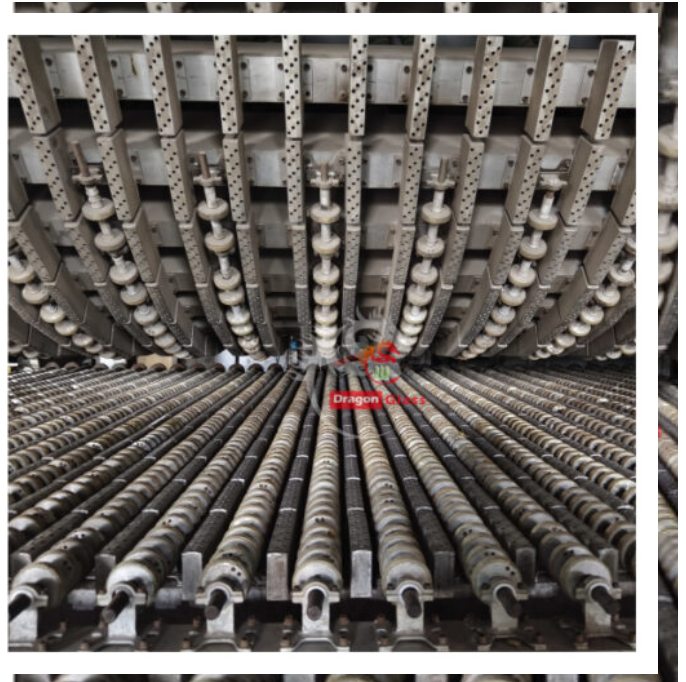
Support over 12 types of edge polishing, including Flat polished, beveling, and round edge, no matter whether building glass, or furniture glass edges or if you have other glass requirements, kindly [contact our team](#).





## **Bending and tempered line**

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



## Laminating line

The professional workers will combine two pieces of 4mm toughened glass (5/32 toughened glass) with interlayers 0.76 PVB, and make a pre-laminate before high temperature and pressure.





## Autoclave

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



## 7. Packing and Delivery

Strict inspection for laminated glass before delivery



***Laminated glass inspection by flashlight in Dragon Glass***





## ***Safety packing***

Recently, we are sending such kind of glass, 442 VSG per 3 weeks, if you are interested, you can let us anytime, and we can put your order in our bulk order production, it will save more budget from your side.

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