



**TEST REPORT**

**REPORT NUMBER: 160219001SHF-BP-1**  
ORIGINAL ISSUE DATE: February 24, 2016

**EVALUATION CENTER**

Intertek Testing Services Ltd., Shanghai  
Plant 7, No. 6958 Daye Road, Fengxian District, Shanghai, China

**RENDERED TO**

**SHANGHAI YEELION IND. CO., LTD.**  
**ROOM 2403, UNIT NO.17, LANE NO. 588, ZEPU ROAD,**  
**JIADING DISTRICT, SHANGHAI, CHINA.**

**PRODUCT EVALUATED**

Tempered Glass  
Model: Thickness of 8 mm

**EVALUATION PROPERTY**

Impact Test

**Report of Testing Tempered Glass (Model: Thickness of 8 mm) for compliance with the applicable requirements of the following criteria: Section 5.1 in ANSI Z97.1-2009 American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test.**

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## 2 Introduction

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Intertek has conducted testing for Shanghai Yeelion Ind. Co., Ltd. on Tempered Glass (Model: Thickness of 8 mm) to evaluate Impact Test. Testing was conducted in accordance with Section 5.1 in ANSI Z97.1-2009. This evaluation began on February 19, 2016 and was completed on February 22, 2016.

## 3 Test Samples

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### 3.1. SAMPLE SELECTION

Samples were randomly selected on January 26, 2016 by Intertek Representative Weber Wang, at the Dongguan Success Glass & Mirror Co., Ltd. located at Suifengnian Industrial District, Shatian Town, Dongguan City, Guangdong Province, China. Samples were received at the Evaluation Center on February 1, 2016.

The subject test specimens were traceable samples selected from the manufacturer's facility. Intertek selected the specimens and had verified the manufacturing techniques and quality assurance procedures.

### 3.2. SAMPLE DESCRIPTION

**Table 1 Specimen Description**

Sample ID	Sample Size (mm) Length × Width × Thickness	Type	Quantity (pieces)
S160219001SHF-001~ S160219001SHF-006	1930 × 863 × 8	Tempered Glass	6

Manufacturer: Dongguan Success Glass & Mirror Co. Ltd.

Manufacturer's address: Suifengnian Industrial District, Shatian Town, Dongguan City,  
Guangdong Province, China.

## 4 Testing and Evaluation Methods

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The specimens of Tempered Glass (Model: Thickness of 8 mm) were tested according to Section 5.1 in ANSI Z97.1-2009.

### 4.1. Impact Test

The test was conducted in accordance with ANSI Z97.1-2009 Section 5.1 and 5.2. The required specimen whose size was 1930 mm (length) by 863 mm (width) was mounted and centered on the test frame. The impactor assembly, which was suspended and stabilized in the launch position, was released and fell to hit the center of the specimen. The drop height was 1225 mm. If the specimens did not break after impact testing, the center punch fragmentation test would be performed on each not broken tempered glass specimen. Then the glazing material was judged whether it passed or failed according to the standard.

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## 5 Testing and Evaluation Results

### 5.1. RESULTS AND OBSERVATIONS

The sample test results were summarized in Table 2 below.

**Table 2 Test Results**

Test Item	Test Results		Verdict
Impact Test <sup>1</sup>	The drop height was 1225 mm Drop height class: Class A		Pass
	Specimen 1	After impact test, the specimen was not broken. Then the specimen was conducted to Center Punch Fragmentation Test, mass of ten largest crack-free particles was 9.0 g, no one particle was longer than 4 inches (102 mm).	
	Specimen 2	After impact test, the specimen was not broken. Then the specimen was conducted to Center Punch Fragmentation Test, mass of ten largest crack-free particles was 8.8 g, no one particle was longer than 4 inches (102 mm).	
	Specimen 3	After impact test, the specimen was broken. Mass of ten largest crack-free particles was 17.8 g.	
	Specimen 4	After impact test, the specimen was broken. Mass of ten largest crack-free particles was 8.0 g.	

Note:

1. Requirements of impact test and center punch fragmentation test:  
The total weight of the ten largest crack-free particles shall be no more than 129.4 g (equivalent weight of 10 square inches of the original test specimen) and no one particle shall be longer than 4 inches (102 mm).

## 6 Conclusion

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The Tempered Glass (Model: Thickness of 8 mm) evaluated in this report have been tested in accordance with Section 5.1 and Section 5.2 in ANSI Z97.1-2009. The samples met the requirements of Impact Test per ANSI Z97.1-2009 based on Class A drop height.

The conclusions of this test report may be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

### INTERTEK

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## 7 Appendix A: Sample Photo

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Fig.1 Photo of Representative Samples

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## 8 Revision Page

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<b>Revision No.</b>	<b>Date</b>	<b>Changes</b>	<b>Author</b>	<b>Reviewer</b>
0	February 24, 2016	First Issue	Alvin Zhu	Fred Bao

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