

# Test Report 8412404.


Qingdao Oriental Brother New  
Energy Technology Co., Ltd

## Introduction.

This report has been prepared by David Vinyard and relates to the activity detailed below:

Job/Registration Details	Client Details
<b>Job number:</b> 8412404 Job type: Testing Samples Submitted Start Date: 01/09/2015 Test type: Direct Sample ID: 10158136 <b>Registration:</b> NA Protocol: NA Quality system: NA <b>Registration:</b> NA Protocol: NA Quality system: NA	Qingdao Oriental Brother New Energy Technology Co., Ltd Hengshan Road 27 Jiulong Industrial Park Jiaozhou Qingdao China

The report has been approved for issue by Mark Manito – Team Manager

Approved For Issue	
	Issue Date: 28 August 2015

## Objectives.

Direct test

## Product Scope.

4mm mirror Glass with cat1 Filmback

## Report Summary.

The samples were received on 19 August and the testing was started on 26 August 2015.

The samples submitted complied with the requirements of the test work conducted.

## Test Samples.

Sample Id	ER Number	Description
1	10158136	12 off 4mm Mirror Glass

## Description of Test Samples.

Sample Description
4mm mirror Glass with cat1 Filmback

## Test Requirements.

BS EN 12600:2002 +A1:2010 - Glass in Building - Pendulum test

Clause	Requirements
<b>5</b>	<b>IMPACT</b>
<b>5.3</b>	<b>Impact test (Unmodified side only)</b>
<b>Results table</b>	<b>Actual test results</b> <i>See Table A - BS EN 12600 Template</i>

## Summary of Test Comments.

Clause	Comments
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## Glossary of Terms.

PASS: Complies. Tested by BSI engineers at BSI laboratories.

PASS1: Complies. Witnessed by BSI engineers in manufacturers laboratory.

PASS2: Complies. Tests carried out by third party lab; results accepted by BSI.

PASS\*: Report resulted in uncertainty and states that Compliance is more probable than non-compliance.

FAIL: Non compliance – Product does not meet the requirements of this clause.

FAIL\*: Report resulted in uncertainty and states that Non-compliance is more probable than compliance.

N/A: Not applicable to design under consideration.

N/T: Not tested due to similarity to previously tested item; reference earlier test report.

## Conditions of Issue.

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## Table A - BS EN 12600

## Product Description.

## TEST ITEMS

A) 4mm mirror Glass with cat1 Filmback

## SAMPLE SIZES

- A) 1. 1938 x 876  
2. 1938 x 876  
3. 1938 x 876  
4. 1938 x 876  
5. 1938 x 876

## Test and Examination of Glass in Building - Pendulum test.

## INTRODUCTION

Rig Calibration date: 21 June 2013 (3 year interval)

Date samples received: 17<sup>th</sup> August 2015Date tested: 26<sup>th</sup> August 2015

## Summary of Results.

The test samples were tested to the method described in BS EN12600:2002.

The results of which are as follows:

TEST ITEMS	CLASS	ASSESSMENT
A	3 (190mm)	pass
A	2 (450mm)	pass
	1 (1200mm)	N/A

TEST ITEMS	PERFORMANCE CLASSIFICATION
A	2 B 2

- 1 is the highest drop height class at which the product either did not break or broke in accordance with a) or b) of Clause 4.
- C is the mode of breakage

+ 3 is the highest drop height class at which the product either did not break or when broke, broke in accordance with a) clause

## Test Results.

### TEST METHOD

#### ITEM A

#### CLAUSE

#### 5 IMPACT

#### 5.3 Impact test (Unmodified side only)

Type	- Mirror Glass With cat1 Filmback
Thickness	- 4mm Nominal
Weight equivalent to 4400mm	- 43.74
Weight equivalent to 1000mm	- 99.42g
Tyre pressure	- 3.5bar

Sample No	Impact No	Result of Impact	Particle Wt (g)	Assessment
<b><u>Drop height 190mm</u></b>				
1	1	Safe breakage	6.10g	pass
2	2	No breakage	-	pass
3	4	No breakage	-	pass
4	6	No breakage	-	pass
<b><u>Drop height 450mm</u></b>				
2	3	No breakage	-	pass
3	5	No breakage	-	pass
4	7	No breakage	-	pass
5	8	No breakage	-	pass

\*\*\* End of Report \*\*\*