

Test Report



Report No BG003239/1-2

Client omissis in compliance with the privacy laws

Authority & date Purchase Order from the Client reference No 96/155/037 dated 1 May 1996

Items tested
6mm Clear toughened glass
8mm Clear toughened glass
10mm Clear toughened glass
15mm Clear toughened glass
19mm Clear toughened glass

Specifications BS 6206:1981 - Flat glass for use in buildings

Results See Summary of Results on page 2

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Issue Date

25 June 1996

Conditions of issue

This Test Report is issued subject to the conditions stated in current issue of *Test Leaflet 1* 'General conditions relating to acceptance of testing'. The results contained herein apply only to the particular sample/s tested and to the specific tests carried out, as detailed in this Test Report. The issuing of this Test Report does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by BSI of any product. No extract, abridgement or abstraction from a Test Report may be published or used to advertise a product without the written consent of the Director, BSI Testing, who reserves the absolute right to agree or reject all or any of the details of any items or publicity for which consent may be sought.

TEST, EXAMINATION AND ASSESSMENT OF FLAT GLASS FOR USE IN BUILDINGS**INTRODUCTION**

At the request of C M I Ltd the flat glass samples detailed below, were tested and assessed against requirements of BS 6206:1981 as indicated on the following pages of this Report.. This request was made in a purchase order from the Client dated 1 May 1996. It is emphasized that assessments were not made against other clauses of the Specification.

TEST ITEMS

A) 6 off 6mm Symmetric clear toughened glass 1930 x 865mm

Date of test: 14 June 1996

B) 6 off 8mm Symmetric clear toughened glass 1930 x 865mm

Date of test: 14 June 1996

C) 6 off 10mm Symmetric clear toughened glass 1930 x 865mm

Date of test: 14 June 1996

D) 6 off 15mm Symmetric clear toughened glass 1930 x 865mm

Date of test: 13 June 1996

E) 6 off 19mm Symmetric clear toughened glass 1930 x 865mm

Date of test: 13 June 1996

SUMMARY OF RESULTS

The test samples were tested to the method described in BS 6206:1981.

The results of which are as follows:

TEST ITEMS	CLASS	ASSESSMENT
A), B), C), D), E)	Fragmentation	Pass
A), B), C), D), E)	C (305mm)	Pass
A), B), C), D), E)	B (457mm)	Pass
A), B), C), D), E)	A (1219mm)	Pass
A), B), C), D), E)	Marking	Pass

TESTING AND EXAMINATION**Item A**

Clause No		Assessment
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5.1.4 Test for toughening quality

Fragmentation minimum count	40	Actual	77	Pass
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5. Impact**5.3 Impact test**

Type	- Symmetric clear toughened glass 1930 x 865mm
Thickness	- 6.00mm Nominal
Weight of 6500mm ²	- 97.5g

<u>Sample No.</u>	<u>Impact No.</u>	<u>Result of Impact</u>	<u>Particle Weight (g)</u>	<u>Assessment</u>
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Drop height 305mm

1	1	No breakage	-	Pass
2	4	No breakage	-	Pass
3	7	No breakage	-	Pass
4	10	No breakage	-	Pass

Drop height 457mm

1	2	No breakage	-	Pass
2	5	No breakage	-	Pass
3	8	No breakage	-	Pass
4	11	No breakage	-	Pass

Drop height 1219mm

1	3	Broken safely	29	Pass
2	6	Broken safely	23	Pass
3	9	Broken safely	25	Pass
4	12	Broken safely	19	Pass

TESTING AND EXAMINATION**Item B**

Clause No		Assessment
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5.1.4 Test for toughening quality

Fragmentation minimum count	40	Actual	80	Pass
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5. Impact**5.3 Impact test**

Type	- Symmetric clear toughened glass 1930 x 865mm
Thickness	- 8.00mm Nominal
Weight of 6500mm ²	- 130.0g

<u>Sample No.</u>	<u>Impact No.</u>	<u>Result of Impact</u>	<u>Particle Weight (g)</u>	<u>Assessment</u>
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Drop height 305mm

1	1	No breakage	-	Pass
2	4	No breakage	-	Pass
3	7	No breakage	-	Pass
4	10	No breakage	-	Pass

Drop height 457mm

1	2	No breakage	-	Pass
2	5	No breakage	-	Pass
3	8	No breakage	-	Pass
4	11	No breakage	-	Pass

Drop height 1219mm**Particle Count**

1	3	No breakage	-	67	Pass
2	6	No breakage	-	67	Pass
3	9	No breakage	-	84	Pass
4	12	No breakage	-	66	Pass

TESTING AND EXAMINATION**Item C**

Clause No		Assessment
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5.1.4 Test for toughening quality

Fragmentation minimum count	40	Actual	80	Pass
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5. Impact**5.3 Impact test**

Type	- Symmetric clear toughened glass 1930 x 865mm
Thickness	- 10.00mm Nominal
Weight of 6500mm ²	- 162.5g

<u>Sample No.</u>	<u>Impact No.</u>	<u>Result of Impact</u>	<u>Particle Weight (g)</u>	<u>Assessment</u>
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Drop height 305mm

1	1	No breakage	-	Pass
2	4	No breakage	-	Pass
3	7	No breakage	-	Pass
4	10	No breakage	-	Pass

Drop height 457mm

1	2	No breakage	-	Pass
2	5	No breakage	-	Pass
3	8	No breakage	-	Pass
4	11	No breakage	-	Pass

Drop height 1219mm

<u>Sample No.</u>	<u>Impact No.</u>	<u>Result of Impact</u>	<u>Particle Weight (g)</u>	<u>Assessment</u>
			<u>Particle Count</u>	
1	3	No breakage	72	Pass
2	6	No breakage	68	Pass
3	9	No breakage	71	Pass
4	12	No breakage	77	Pass

TESTING AND EXAMINATION

Item D

Clause No **Assessment**

5.1.4 Test for toughening quality

Fragmentation minimum count 40 Actual 52 Pass

5. Impact

5.3 Impact test

Type - Symmetric clear toughened glass 1930 x 865mm
 Thickness - 15.00 Nominal
 Weight of 6500mm² - 243.75g

<u>Sample No.</u>	<u>Impact No.</u>	<u>Result of Impact</u>	<u>Particle Weight (g)</u>	<u>Assessment</u>
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Drop height 305mm

1	1	No breakage	-	Pass
2	4	No breakage	-	Pass
3	7	No breakage	-	Pass
4	10	No breakage	-	Pass

Drop height 457mm

1	2	No breakage	-	Pass
2	5	No breakage	-	Pass
3	8	No breakage	-	Pass
4	11	No breakage	-	Pass

Drop height 1219mm

				<u>Particle Count</u>	
1	3	No breakage	-	50	Pass
2	6	No breakage	-	59	Pass
3	9	No breakage	-	56	Pass
4	12	No breakage	-	57	Pass

TESTING AND EXAMINATION

Item E

Clause No		Assessment
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5.1.4 Test for toughening quality

Fragmentation minimum count	40	Actual	44	Pass
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5. Impact**5.3 Impact test**

Type	- Symmetric clear toughened glass 1930 x 865mm
Thickness	- 19.00mm Nominal
Weight of 6500mm ²	- 308.75g

<u>Sample No.</u>	<u>Impact No.</u>	<u>Result of Impact</u>	<u>Particle Weight (g)</u>	<u>Assessment</u>
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Drop height 305mm

1	1	No breakage	-	Pass
2	4	No breakage	-	Pass
3	7	No breakage	-	Pass
4	10	No breakage	-	Pass

Drop height 457mm

1	2	No breakage	-	Pass
2	5	No breakage	-	Pass
3	8	No breakage	-	Pass
4	11	No breakage	-	Pass

Drop height 1219mm

				<u>Particle Count</u>	
1	3	No breakage	-	48	Pass
2	6	No breakage	-	52	Pass
3	9	No breakage	-	56	Pass
4	12	No breakage	-	49	Pass

TESTING AND EXAMINATION (Continued)

Clause No	Item A, B, C, D, E	Assessment
6.	Marking	
	The samples shall be marked as follows:	
	a) An identifiable name or trademark	Pass
	b) The type of material	Pass
	c) The number of the British Standard i.e. BS 6206	Pass
	d) The classification relating to impact test behaviour	Pass

Actual marking

TOUGHENED
BS 6206 - CLASS A
GLASS FER
HST