



Architectural Testing

**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

ECKELT GLAS GMBH  
Resthofstraße 18  
4400 Steyr  
Austria

Report No: 01-49266.03  
Test Date: 01/29/04  
Report Date: 03/26/04

6 mm Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 69°F

Duration of Pre-Conditioning @ 75 ±5°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests:**

Spec. No.	Test Standard	Thickness, millimeters	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-1984	5.87	48	21	95
2	ANSI Z97.1-1984	5.86	48	Did Not Break	95
3	ANSI Z97.1-1984	5.87	48	Did Not Break	95
4	ANSI Z97.1-1984	5.86	48	27	95
5	16 CFR 1201	5.88	48	Did Not Break	95

For ARCHITECTURAL TESTING, INC.:

Digitally Signed by: Justin M. Mann

Justin M. Mann  
Technician

Digitally Signed by: Craig H. Wagner

Craig H. Wagner, P.E.  
Director - Code Compliance

JMM:jmm/nlb  
01-49266.03

130 Derry Court  
York, PA 17402-9405  
phone: 717.764.7700  
fax: 717.764.4129  
www.archtest.com



**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

SAFETY GLAZING CERTIFICATION COUNCIL  
P.O. Box 730  
Sackets Harbor, New York 13685

Report No: 61222.01-122-37  
Test Date: 01/03/06  
Report Date: 01/13/06

Sample ID.: SGCC - 2850 L05 1/4" Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 61°F

Duration of Pre-Conditioning @ 65 - 85°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests: (ANSI Class A - CPSC Cat. II)**

Spec. No.	Test Standard	Thickness, inches	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-2004	0.232	48	33	96
2	ANSI Z97.1-2004	0.237	48	Did not break	98
3	ANSI Z97.1-2004	0.231	48	Did not break	95
4	ANSI Z97.1-2004	0.231	48	Did not break	95
5	16 CFR 1201	0.231	48	Did not break	95

For ARCHITECTURAL TESTING, INC.:

RECEIVED JAN 19 2006

Digitally Signed by: Andrew O'Neill

Andrew O'Neill  
Technician

APO:apo/nlb

Digitally Signed by: Scott Swaltek

Scott T. Swaltek, P.E.  
Senior Project Engineer

2006.01.16 10:07:25 -05'00'



130 Derry Court  
York, PA 17402-9405  
phone: 717-764-7700  
fax: 717-764-4129



Architectural Testing

**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

ECKELT GLAS GMBH  
Resthofstraße 18  
4400 Steyr  
Austria

Report No: 01-49266.05  
Test Date: 01/30/04  
Report Date: 03/26/04

8 mm Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 66°F

Duration of Pre-Conditioning @ 70 ±5°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests:**

Spec. No.	Test Standard	Thickness, millimeters	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-1984	7.89	48	Did Not Break	128
2	ANSI Z97.1-1984	7.87	48	Did Not Break	128
3	ANSI Z97.1-1984	7.90	48	Did Not Break	128
4	ANSI Z97.1-1984	7.90	48	Did Not Break	128
5	16 CFR 1201	7.87	48	Did Not Break	128

For ARCHITECTURAL TESTING, INC.:

Digitally Signed by: Justin M. Mann

Justin M. Mann  
Technician

JMM:jmm/nlb  
01-49266.05

Digitally Signed by: Craig H. Wagner

Craig H. Wagner, P.E.  
Director - Code Compliance

130 Derry Court  
York, PA 17402-9405  
phone: 717.764.7700  
fax: 717.764.4129  
www.archtest.com



**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

SAFETY GLAZING CERTIFICATION COUNCIL  
P.O. Box 730  
Sackets Harbor, New York 13685

Report No: 61222.02-122-37  
Test Date: 01/03/06  
Report Date: 01/13/06

Sample ID.: SGCC - 2851 L05 5/16" Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 64°F

Duration of Pre-Conditioning @ 65 - 85°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests: (ANSI Class A - CPSC Cat. II)**

Spec. No.	Test Standard	Thickness, inches	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-2004	0.317	48	34	131
2	ANSI Z97.1-2004	0.316	48	40	130
3	ANSI Z97.1-2004	0.315	48	42	130
4	ANSI Z97.1-2004	0.316	48	25	130
5	16 CFR 1201	0.315	48	36	130

For ARCHITECTURAL TESTING, INC.:

Digitally Signed by: Andrew O'Neill

Andrew O'Neill  
Technician

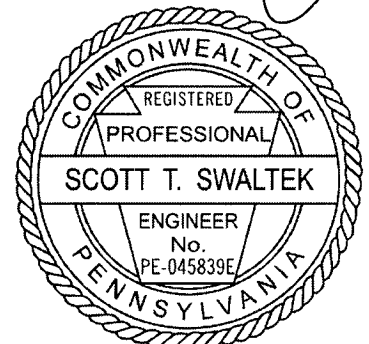
APO:apo/nlb

RECEIVED JAN 19 2006

Digitally Signed by: Scott Swaltek

Scott T. Swaltek, P.E.  
Senior Project Engineer

2006.01.16 10:08:10 -05'00'



130 Derry Court  
York, PA 17402-9405  
phone: 717-764-7700  
fax: 717-764-4129



Architectural Testing

**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

ECKELT GLAS GMBH  
Resthofstraße 18  
4400 Steyr  
Austria

Report No: 01-49266.04  
Test Date: 01/29/04  
Report Date: 03/26/04

10 mm Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 69°F

Duration of Pre-Conditioning @ 75 ±5°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests:**

Spec. No.	Test Standard	Thickness, millimeters	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-1984	9.86	48	Did Not Break	160
2	ANSI Z97.1-1984	9.86	48	Did Not Break	160
3	ANSI Z97.1-1984	9.89	48	Did Not Break	160
4	ANSI Z97.1-1984	9.89	48	Did Not Break	160
5	16 CFR 1201	9.91	48	Did Not Break	161

For ARCHITECTURAL TESTING, INC.:

Digitally Signed by: Justin M. Mann

Justin M. Mann  
Technician

Digitally Signed by: Craig H. Wagner

Craig H. Wagner, P.E.  
Director - Code Compliance

JMM:jmm/nlb  
01-49266.04

130 Derry Court  
York, PA 17402-9405  
phone: 717.764.7700  
fax: 717.764.4129  
www.archtest.com



**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

SAFETY GLAZING CERTIFICATION COUNCIL  
P.O. Box 730  
Sackets Harbor, New York 13685

Report No: 61222.03-122-37  
Test Date: 01/03/06  
Report Date: 01/13/06

Sample ID.: SGCC - 2852 L05 3/8" Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 67°F

Duration of Pre-Conditioning @ 65 - 85°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests: (ANSI Class A / CPSC Cat. II)**

Spec. No.	Test Standard	Thickness, inches	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-2004	0.394	48	39	162
2	ANSI Z97.1-2004	0.392	48	Did not break	162
3	ANSI Z97.1-2004	0.394	48	55	162
4	ANSI Z97.1-2004	0.395	48	61	163
5	16 CFR 1201	0.394	48	Did not break	162

For ARCHITECTURAL TESTING, INC.:

RECEIVED JAN 19 2006

Digitally Signed by: Andrew O'Neill

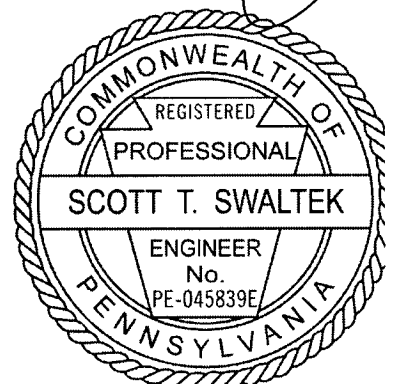
Andrew O'Neill  
Technician

APO:apo/nlb

Digitally Signed by: Scott Swaltek

Scott T. Swaltek, P.E.  
Senior Project Engineer

2006.01.16 10:09:10 -05'00'



130 Derry Court  
York, PA 17402-9405  
phone: 717-764-7700  
fax: 717-764-4129



Architectural Testing

**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

ECKELT GLAS GMBH  
Resthofstraße 18  
4400 Steyr  
Austria

Report No: 01-49266.06  
Test Date: 01/30/04  
Report Date: 03/26/04

12 mm Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 67°F

Duration of Pre-Conditioning @ 75 ±5°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests:**

Spec. No.	Test Standard	Thickness, millimeters	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-1984	12.03	48	Did Not Break	195
2	ANSI Z97.1-1984	12.04	48	Did Not Break	195
3	ANSI Z97.1-1984	12.09	48	Did Not Break	196
4	ANSI Z97.1-1984	12.09	48	Did Not Break	196
5	16 CFR 1201	12.08	48	Did Not Break	196

For ARCHITECTURAL TESTING, INC.:

Digitally Signed by: Justin M. Mann

Justin M. Mann  
Technician

JMM:jmm/nlb  
01-49266.06

Digitally Signed by: Craig H. Wagner

Craig H. Wagner, P.E.  
Director - Code Compliance

130 Derry Court  
York, PA 17402-9405  
phone: 717.764.7700  
fax: 717.764.4129  
www.archtest.com



**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

SAFETY GLAZING CERTIFICATION COUNCIL  
P.O. Box 730  
Sackets Harbor, New York 13685

Report No: 61222.04-122-37  
Test Date: 01/04/06  
Report Date: 01/13/06

Sample ID.: SGCC - 2853 L05 1/2" Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 65°F

Duration of Pre-Conditioning @ 65 - 85°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests: (ANSI Class A / CPSC Cat. II)**

Spec. No.	Test Standard	Thickness, inches	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-2004	0.469	48	Did not break	193
2	ANSI Z97.1-2004	0.471	48	Did not break	194
3	ANSI Z97.1-2004	0.469	48	Did not break	193
4	ANSI Z97.1-2004	0.469	48	Did not break	193
5	16 CFR 1201	0.478	48	Did not break	197

For ARCHITECTURAL TESTING, INC.:

RECEIVED JAN 19 2006

Digitally Signed by: Andrew O'Neill

Andrew O'Neill  
Technician

APO:apo/nlb

Digitally Signed by: Scott Swaltek

Scott T. Swaltek, P.E.  
Senior Project Engineer

2006.01.16 10:10:12 -05'00'



130 Derry Court  
York, PA 17402-9405  
phone: 717-764-7700  
fax: 717-764-4129



Architectural Testing

**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

ECKELT GLAS GMBH  
Resthofstraße 18  
4400 Steyr  
Austria

Report No: 01-49266.01  
Test Date: 01/29/04  
Report Date: 03/26/04

15 mm Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 68°F

Duration of Pre-Conditioning @ 75 ±5°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests:**

Spec. No.	Test Standard	Thickness, millimeters	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-1984	14.93	48	Did Not Break	242
2	ANSI Z97.1-1984	14.98	48	Did Not Break	243
3	ANSI Z97.1-1984	15.01	48	Did Not Break	244
4	ANSI Z97.1-1984	14.94	48	Did Not Break	242
5	16 CFR 1201	14.99	48	Did Not Break	243

For ARCHITECTURAL TESTING, INC.:

Digitally Signed by: Justin M. Mann

Justin M. Mann  
Technician

JMM:jmm/nlb  
01-49266.01

Digitally Signed by: Craig H. Wagner

Craig H. Wagner, P.E.  
Director - Code Compliance

130 Derry Court  
York, PA 17402-9405  
phone: 717.764.7700  
fax: 717.764.4129  
www.archtest.com



**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

SAFETY GLAZING CERTIFICATION COUNCIL  
P.O. Box 730  
Sackets Harbor, New York 13685

Report No: 61222.05-122-37  
Test Date: 12/30/05  
Report Date: 01/13/06

Sample ID.: SGCC - 2854 L05 5/8" Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 73°F

Duration of Pre-Conditioning @ 65 - 85°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests: (ANSI Class A / CPSC Cat. II)**

Spec. No.	Test Standard	Thickness, inches	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-2004	*0.587	48	Did not break	242
2	ANSI Z97.1-2004	*0.587	48	Did not break	242
3	ANSI Z97.1-2004	*0.594	48	Did not break	245
4	ANSI Z97.1-2004	*0.594	48	Did not break	245
5	16 CFR 1201	*0.591	48	Did not break	243

\* These samples do not meet the thickness requirements of ASTM C 1036-01.

RECEIVED JAN 19 2006

For ARCHITECTURAL TESTING, INC.:

Digitally Signed by: Andrew O'Neill

Andrew O'Neill  
Technician

APO:apo/nlb

Digitally Signed by: Scott Swaltek

Scott T. Swaltek, P.E.  
Senior Project Engineer

2006.01.16 10:11:19 -05'00'



130 Derry Court  
York, PA 17402-9405  
phone: 717-764-7700  
fax: 717-764-4129



Architectural Testing

**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

ECKELT GLAS GMBH  
Resthofstraße 18  
4400 Steyr  
Austria

Report No: 01-49266.02  
Test Date: 01/29/04  
Report Date: 03/26/04

19 mm Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 68°F

Duration of Pre-Conditioning @ 75 ±5°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests:**

Spec. No.	Test Standard	Thickness, millimeters	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-1984	18.88	48	Did Not Break	306
2	ANSI Z97.1-1984	18.86	48	Did Not Break	306
3	ANSI Z97.1-1984	18.75	48	Did Not Break	304
4	ANSI Z97.1-1984	18.88	48	Did Not Break	306
5	16 CFR 1201	18.85	48	Did Not Break	306

For ARCHITECTURAL TESTING, INC.:

Digitally Signed by: Justin M. Mann

Justin M. Mann  
Technician

JMM:jmm/nlb  
01-49266.02

Digitally Signed by: Craig H. Wagner

Craig H. Wagner, P.E.  
Director - Code Compliance

130 Derry Court  
York, PA 17402-9405  
phone: 717.764.7700  
fax: 717.764.4129  
www.archtest.com



**IMPACT TESTING ON SAFETY GLAZING MATERIAL**

Rendered to:

SAFETY GLAZING CERTIFICATION COUNCIL  
P.O. Box 730  
Sackets Harbor, New York 13685

Report No: 61222.06-122-37  
Test Date: 12/30/05  
Report Date: 01/13/06

Sample ID.: SGCC - 2855 L05      3/4" Tempered Transparent Glass

Size Classification: Unlimited

Lab Temperature: 72°F

Duration of Pre-Conditioning @ 65 - 85°F: 48 Hours

Test Size: 34" wide by 76" high

All test specimens were destroyed by test or by our personnel and have been disposed of as trash.

**Impact Tests: (ANSI Class A / CPSC Cat. II)**

Spec. No.	Test Standard	Thickness, inches	Impact Drop Height, inches	Test Results, grams	Acceptance Criteria, grams
1	ANSI Z97.1-2004	0.735	48	Did not break	303
2	ANSI Z97.1-2004	0.735	48	Did not break	303
3	ANSI Z97.1-2004	0.734	48	Did not break	302
4	ANSI Z97.1-2004	0.742	48	Did not break	306
5	16 CFR 1201	0.733	48	Did not break	302

For ARCHITECTURAL TESTING, INC.:

Digitally Signed by: Andrew O'Neill

Andrew O'Neill  
Technician

APO:apo/nlb

RECEIVED JAN 19 2006

Digitally Signed by: Scott Swaltek

Scott T. Swaltek, P.E.  
Senior Project Engineer

2006.01.16 10:12:07 -05'00'

130 Derry Court  
York, PA 17402-9405  
phone: 717-764-7700  
fax: 717-764-4129

